

Mount Annan High School



HSC Minimum Standards

Band 3 Numeracy Goals

Name:

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As one would expect, some of the questions cover multiple points on the national standards. The most relevant standard was chosen. Students completing this book of exercises will use multiple skills to complete a single question.

The reliance on arithmetical drills was intentional as it was designed to refresh these skills which may be lacking due to calculator use. By no means should students be expected to complete all the exercises without a calculator. It would be hoped that students will try to answer as many questions as possible by working them out on paper. Turning to the calculator can sometimes be useful to confirm answers especially if decimals and currency are involved.

This booklet is a trial and any constructive criticism is welcomed as it is a work in progress toward assisting students experiencing trouble satisfying the minimum standards now required for HSC accreditation.

Find the sum.

2. 50 + 85

4. 35 + 63

Find the sum.

Find the quotient.

21. 22. 23. 24. 25. 26. 27. 28.
$$\frac{2}{3}$$
 29. $\frac{2}{3}$ 29. 27. 28. 3

Find the product.

Find the product.

Find the difference.

Find the difference.

Find the sum.

Solve.

- 81. Two apples are in the basket. Four more apples are put in the basket. How many apples are in the basket now?
- 82. Two red plums and two green plums are in the basket. How many plums are in the basket?
- 83. Eight peaches were in the basket. More peaches were added to the basket. Now there are 16 peaches. How many peaches were added to the basket?

84.	Some oranges were in the basket. Nine more oranges were added to the basket. Now there are 12 oranges. How many oranges were in the basket before more oranges were added?
85.	Paul has seven pears and David has six pears. How many pears do Paul and David have together?
86.	Marin has eight more marbles than Marin. Marin has nine marbles. How many marbles does Marin have?
87.	Eight balls were in the basket. Five are red and the rest are green. How many balls are green?
88.	Paul has eight pears and Allan has two pears. How many pears do Paul and Allan have together?
89.	11 apples were in the basket. Three are red and the rest are green. How many apples are green?
90.	Six red oranges and five green oranges are in the basket. How many oranges are in the basket?
Solv	ve.
91.	You have 54 balls and want to share them equally with six people. How many balls would each person get?
92.	Jake is reading a book with 40 pages. If Jake wants to read the same number of pages every day, how many pages would Jake have to read each day to finish in five days?
93.	How many three cm pieces of rope can you cut from a rope that is 18 cm long?

94.	A box of oranges weighs 35 pounds. If one orange weighs five pounds, how many oranges are there in the box?
95.	Jennifer made 72 cookies for a bake sale. She put the cookies in bags, with eight cookies in each bag. How many bags did she have for the bake sale?
96.	Audrey ordered seven pizzas. The bill for the pizzas came to \$21. What was the cost of each pizza?
97.	Donald is reading a book with 21 pages. If Donald wants to read the same number of pages every day, how many pages would Donald have to read each day to finish in seven days?
98.	A box of oranges weighs 12 pounds. If one orange weighs six pounds, how many oranges are there in the box?
99.	Paul ordered nine pizzas. The bill for the pizzas came to \$36. What was the cost of each pizza?
100.	Amy made 32 cookies for a bake sale. She put the cookies in bags, with four cookies in each bag. How many bags did she have for the bake sale?
Solve	
	Janet's garden has six rows of pumpkins. Each row has three pumpkins. How many pumpkins does Janet have in all?
102.	Allan can cycle two miles per hour. How far can Allan cycle in three hours?
103.	Jake swims two laps every day. How many laps will Jake swim in five days?

104.	If there are nine marbles in each box and there are eight boxes, how many marbles are there in total?
105.	Steven has nine times more balls than Billy. Billy has two balls. How many balls does Steven have?
106.	Marcie's garden has three rows of pumpkins. Each row has six pumpkins. How many pumpkins does Marcie have in all?
107.	Steven can cycle nine miles per hour. How far can Steven cycle in three hours?
108.	Michele has three times more apples than Donald. Donald has seven apples. How many apples does Michele have?
109.	If there are five peaches in each box and there are seven boxes, how many peaches are there in total?
110.	Jackie swims six laps every day. How many laps will Jackie swim in two days?
Solve	e.
111.	Marcie has zero fewer oranges than Janet. Janet has eight oranges. How many oranges does Marcie have?
112.	Some apples were in the basket. Two apples were taken from the basket. Now there are zero apples. How many apples were in the basket before some of the apples were taken?
113.	Seven pears are in the basket. Four are red and the rest are green. How many pears are green?

- 114. Eight plums were in the basket. Some of the plums were removed from the basket. Now there are five plums. How many plums were removed from the basket?
- 115. Three balls are in the basket. Two balls are taken out of the basket. How many balls are in the basket now?
- 116. Donald has seven peaches. Brian has eight peaches. How many more peaches does Brian have than Donald?
- 117. Six marbles are in the basket. Two marbles are taken out of the basket. How many marbles are in the basket now?
- 118. Some pears were in the basket. Four pears were taken from the basket. Now there are two pears. How many pears were in the basket before some of the pears were taken?
- 119. Two apples are in the basket. Two are red and the rest are green. How many apples are green?
- 120. Sharon has one fewer ball than Marcie. Marcie has six balls. How many balls does Sharon have?

Find the solution.

123.
$$(9+9)^2 =$$
 _____ 124. $4+4+3+1=$ _____

125.
$$(8+3) \times (1+4) =$$
 126. $7+7-1+6 =$

127.
$$6 + 1^2 + 8 + 1^2 =$$
 128. $(5 + 8)^2 + (2 + 7)^2 =$

133.
$$(7+6)^2 + (1+6)^2 =$$

146.
$$(4+4)^2 + (5+7)^2 =$$

147.
$$(7^2) \times (8^2) + 7 =$$

150.
$$(9^2) \times (6^2) + 4 =$$

156.
$$(3 + 1)^2 + (7 + 4)^2 =$$

157.
$$3 + 9^2 + 3 + 2^2 =$$

158.
$$(1+7)^2 + (1+5)^2 =$$

170.
$$(1 + 8)^2 + (7 + 3)^2 =$$

171.
$$(7 + 5)^2 + (6 + 4)^2 =$$

175.
$$(3+3)^2 + (5+1)^2 =$$
 176. $2+8+3+2=$

177.
$$(5+9)^2 =$$

190.
$$(6 + 3)^2 =$$

192.
$$(5^2) \times (9^2) + 8 =$$

202.
$$(7^2) \times (4^2) + 2 =$$

207.
$$(3+6)^2 =$$

219.
$$(5^2) \times (5^2) + 3 =$$

219.
$$(5^2) \times (5^2) + 3 =$$
 220. $9 \times 2 \times 5 =$

Solve	e the following.
221.	Sandra baby-sat for 14 hours over two weeks. She earned \$4.00 an hour. What was her gross pay?
222.	How much will Sharon earn if she earns \$4.80 for each hour worked, works 47 hours, and has payroll deductions of \$65.42?
223.	How much will Brian earn if he earns \$8.20 per hour and works 30 hours?
224.	Marin's gross pay is \$284.20. After deductions of 27% what is her net pay?
225.	If Paul earns \$176.40 after deductions of \$75.60 and after working 21 hours what is the hourly rate?
226.	If Amy earns \$253.80 after working 47 hours what is the hourly rate?
227.	Steven's net pay is \$245.86 after deductions of \$73.44. He makes \$10.30 per hour. How many hours did he work?
228.	What is Adam's net pay if he earns \$4.50 for each hour worked, works 11 hours, and has payroll deductions of 20%?
229.	Janet's gross pay is \$288.60. After deductions of 23% what is her net pay?
230.	If Jennifer earns \$232.30 after working 23 hours what is the hourly rate?
231.	How much will David earn if he earns \$14.10 per hour and works 50 hours?

232.	What is Paul's net pay if he earns \$12.90 for each hour worked, works 28 hours, and has payroll deductions of 20%?
233.	If Adam earns \$153.09 after deductions of \$65.61 and after working 27 hours what is the hourly rate?
234.	Ellen baby-sat for 18 hours over two weeks. She earned \$4.80 an hour. What was her gross pay?
235.	Brian's net pay is \$195.99 after deductions of \$31.91. He makes \$5.30 per hour. How many hours did he work?
236.	How much will Marin earn if she earns \$11.00 for each hour worked, works 31 hours, and has payroll deductions of \$34.10?
237.	If Billy earns \$263.25 after deductions of \$74.25 and after working 25 hours what is the hourly rate?
238.	If Amy earns \$569.80 after working 37 hours what is the hourly rate?
239.	Jackie's gross pay is \$152.00. After deductions of 19% what is her net pay?
240.	How much will Paul earn if he earns \$15.10 per hour and works 46 hours?
Expre	ess the currency values in words.
241.	\$38.94
242.	\$61.42
243.	\$3.32

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244. \$77.17			
245. \$94.58			
246. \$63.10			
248. \$90.85			
249. \$19.97			
250. \$48.86			
Solve.			
hot dog = \$1 order of Frei hamburger =	nch-fries = \$0.70	cola = \$1.00 ice cream cone = \$1.30 milk shake = \$2.80 taco = \$2.60	
251	If Marin wanted to buy a deluxe chefries, how much would it cost her?	eeseburger, a milk shake, and an order of French	1
252	Steven wants to buy a hamburger.	How much will it cost him?	
	Ellen purchases an ice cream cone change will she get back from \$10.	e, a taco, and an order of French-fries. How much 00?	1
254	What is the total cost of a hamburg	ger and a cola if the sales tax is five percent?	
255	If Allan buys a hamburger, how mu	ich money will he get back if he pays \$10.00?	
256	What is the total cost of a hamburgis a 5% sales tax?	ger, a hot dog, and a deluxe cheeseburger if there	,
257	What is the total cost of a milk sha	ke, a cola, and an ice cream cone if there is a 5%)
258	If Donald wanted to buy a taco and	I a hot dog, how much would it cost him?	
259	What is the total cost of an order o	f French-fries if the sales tax is five percent?	
260	Brian wants to buy an ice cream co	one. How much will it cost him?	

Compare the fractions.

261. $\frac{5}{8}$ $\frac{2}{8}$ 262. $\frac{3}{4}$ $\frac{1}{4}$ 263. $\frac{4}{5}$ $\frac{2}{5}$ 264. $\frac{2}{3}$ $\frac{1}{3}$ 265. $\frac{4}{6}$ $\frac{3}{6}$ 266. $\frac{1}{8}$ $\frac{6}{8}$ 267. $\frac{2}{6}$ $\frac{5}{6}$

268. $\frac{3}{5}$ $\frac{3}{5}$ 269. $\frac{1}{3}$ $\frac{1}{3}$ 270. $\frac{1}{5}$ $\frac{2}{5}$

Compare the fractions.

271. $\frac{1}{5}$ $\frac{3}{4}$ 272. $\frac{1}{8}$ $\frac{2}{3}$ 273. $\frac{2}{3}$ $\frac{3}{4}$ 274. $\frac{1}{5}$ $\frac{7}{8}$ 275. $\frac{5}{6}$ $\frac{2}{5}$ 276. $\frac{1}{4}$ $\frac{2}{6}$ 277. $\frac{2}{3}$ $\frac{2}{8}$

278. $\frac{3}{5}$ $\frac{3}{4}$ 279. $\frac{4}{6}$ $\frac{1}{3}$ 280. $\frac{2}{8}$ $\frac{2}{5}$

Divide.

281. $6 \div \frac{1}{5} =$ 282. $7 \div \frac{2}{3} =$ 283. $6 \div \frac{1}{6} =$ 284. $7 \div \frac{2}{4} =$ _____

289. $1 \div \frac{2}{3} =$ 290. $5 \div \frac{1}{6} =$

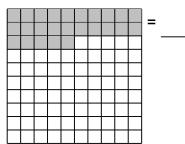
Complete the equivalent fractions.

291. $\frac{1}{5} = \frac{8}{45}$ 292. $\frac{8}{3} = \frac{8}{12}$ 293. $\frac{8}{8} = \frac{24}{48}$ 294. $\frac{2}{4} = \frac{2}{20}$ 295. $\frac{8}{4} = \frac{8}{16}$ 296. $\frac{1}{6} = \frac{3}{30}$

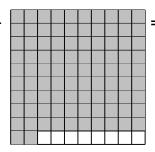
297. $\frac{1}{3} = \frac{1}{18}$ 298. $\frac{1}{5} = \frac{21}{35}$ 299. $\frac{1}{8} = \frac{4}{16}$ 300. $\frac{1}{6} = \frac{9}{54}$

Color the fraction.

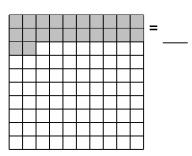
301.



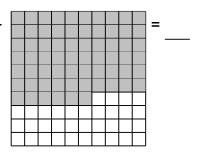
308.



309.



310.



Color the fraction.

Find the sum.

321.
$$\frac{2}{3} + \frac{2}{3} =$$

321.
$$\frac{2}{3} + \frac{2}{3} =$$
 322. $\frac{1}{5} + \frac{4}{5} =$ 323. $\frac{2}{4} + \frac{1}{4} =$ 324. $\frac{5}{8} + \frac{2}{8} =$ _____

323.
$$\frac{2}{4} + \frac{1}{4} =$$

324.
$$\frac{5}{8} + \frac{2}{8} =$$

325.
$$\frac{3}{6} + \frac{1}{6} =$$

325.
$$\frac{3}{6} + \frac{1}{6} =$$
 326. $\frac{2}{8} + \frac{6}{8} =$ 327. $\frac{3}{6} + \frac{4}{6} =$ 328. $\frac{1}{4} + \frac{1}{4} =$

327.
$$\frac{3}{6} + \frac{4}{6} =$$

328.
$$\frac{1}{4} + \frac{1}{4} =$$

329.
$$\frac{4}{8} + \frac{2}{8} =$$
 330. $\frac{1}{5} + \frac{3}{5} =$

330.
$$\frac{1}{5} + \frac{3}{5} =$$

Convert.

331.
$$\frac{2}{9} =$$

332.
$$\frac{2}{4} =$$

333.
$$\frac{1}{3}$$
 =

334.
$$\frac{3}{4}$$
 =

331.
$$\frac{2}{8} =$$
 332. $\frac{2}{4} =$ 333. $\frac{1}{3} =$ 334. $\frac{3}{4} =$ 335. $\frac{2}{6} =$

336.
$$\frac{5}{8}$$
 =

337.
$$\frac{1}{5}$$
 =

338.
$$\frac{2}{3}$$
 =

336.
$$\frac{5}{8} =$$
 337. $\frac{1}{5} =$ 338. $\frac{2}{3} =$ 339. $\frac{4}{5} =$ 340. $\frac{3}{8} =$

340.
$$\frac{3}{8} =$$

Find the product.

341.
$$\frac{1}{6} \times \frac{4}{6} =$$
 342. $\frac{2}{6} \times \frac{4}{6} =$ 343. $\frac{4}{8} \times \frac{3}{8} =$ 344. $\frac{1}{5} \times \frac{1}{5} =$ 345. $\frac{3}{4} \times \frac{1}{4} =$ ___

346.
$$\frac{1}{3} \times \frac{1}{3} =$$
 347. $\frac{2}{4} \times \frac{3}{4} =$ 348. $\frac{2}{5} \times \frac{4}{5} =$ 349. $\frac{3}{6} \times \frac{4}{6} =$ 350. $\frac{4}{8} \times \frac{4}{8} =$

Find the difference.

351.
$$\frac{3}{4} - \frac{1}{4} =$$
 352. $\frac{2}{3} - \frac{1}{3} =$ 353. $\frac{4}{5} - \frac{2}{5} =$ 354. $\frac{4}{8} - \frac{2}{8} =$ 355. $\frac{5}{6} - \frac{4}{6} =$ ____

356.
$$\frac{4}{6} - \frac{1}{6} =$$
 357. $\frac{3}{5} - \frac{1}{5} =$ 358. $\frac{3}{4} - \frac{2}{4} =$ 359. $\frac{7}{8} - \frac{3}{8} =$ 360. $\frac{4}{5} - \frac{3}{5} =$

Convert to improper fractions.

361.
$$1\frac{4}{6} = 362. 6\frac{6}{8} = 363. 2\frac{1}{4} = 364. 5\frac{2}{8} = 365. 8\frac{1}{6} = 366. 2\frac{2}{4} =$$

367.
$$5\frac{1}{5} =$$
 368. $8\frac{7}{8} =$ 369. $9\frac{1}{4} =$ 370. $2\frac{4}{5} =$

Calculate.

371.
$$7\frac{1}{8} + 2\frac{5}{8} =$$
 372. $6\frac{1}{3} + 9\frac{2}{3} =$ 373. $7\frac{2}{5} + 2\frac{1}{5} =$ 374. $5\frac{3}{4} + 2\frac{2}{4} =$ ____

375.
$$8\frac{4}{5} + 6\frac{1}{5} =$$
 376. $4\frac{6}{8} + 7\frac{6}{8} =$ 377. $9\frac{3}{6} + 5\frac{1}{6} =$ 378. $8\frac{3}{4} + 8\frac{1}{4} =$

379.
$$4\frac{1}{3} + 7\frac{2}{3} =$$
 380. $2\frac{7}{8} + 9\frac{2}{8} =$

Multiply.

381.
$$\frac{4}{6}$$
 of 8 = _____ 382. $\frac{4}{5}$ of 8 = _____ 383. $\frac{6}{8}$ of 6 = _____ 384. $\frac{2}{8}$ of 6 = _____

385.
$$\frac{2}{3}$$
 of 6 = _____ 386. $\frac{2}{6}$ of 2 = _____ 387. $\frac{3}{5}$ of 2 = _____ 388. $\frac{1}{4}$ of 1 = _____

389.
$$\frac{1}{4}$$
 of 3 = _____ 390. $\frac{3}{8}$ of 6 = _____

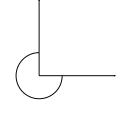
Simplify the fractions.

391.
$$\frac{32}{40} =$$
 392. $\frac{4}{12} =$ 393. $\frac{4}{32} =$ 394. $\frac{12}{16} =$ 395. $\frac{8}{24} =$ 396. $\frac{10}{15} =$ ____

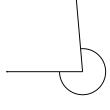
397.
$$\frac{6}{48}$$
 = 398. $\frac{9}{15}$ = 399. $\frac{3}{9}$ = 400. $\frac{28}{42}$ =

Classify each the angles.

401.



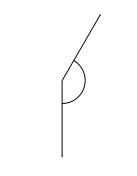
402.



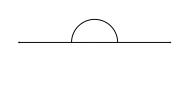
403.



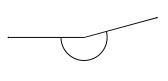
404.



405.



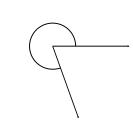
406.



407.



408.



409.



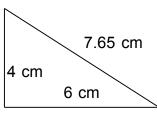


Measure the rectangles.	
411.	412.
413.	414.
415.	416.
417.	418.

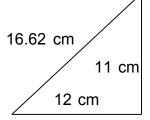
420.

Find the perimeter and area.

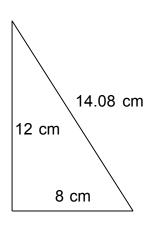
421.



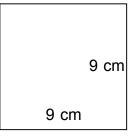
422.



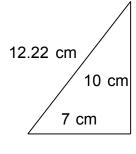
423.

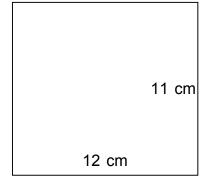


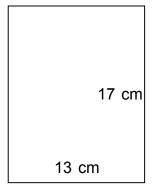
424.



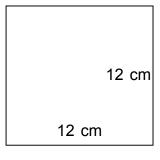
425.



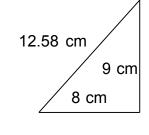




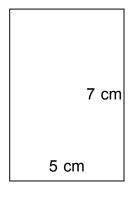
428.



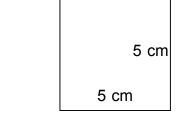
429.



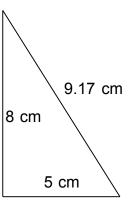
430.



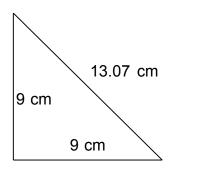
431.

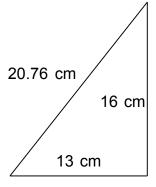


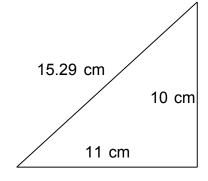
432.



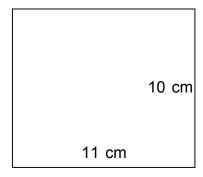
433.



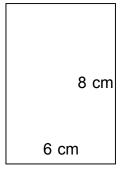




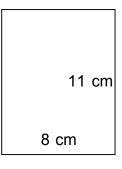
436.



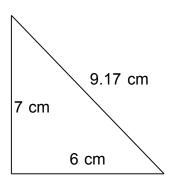
437.



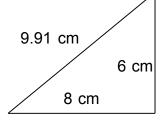
438.



439.

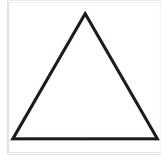


440.

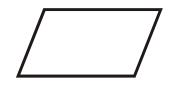


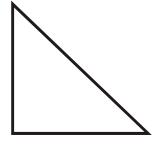
Identify the polygons.

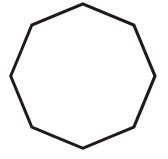
441.



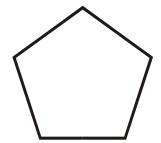
442.







445.



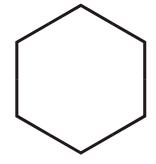
446.



447.



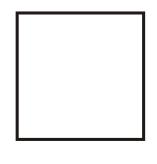
448.



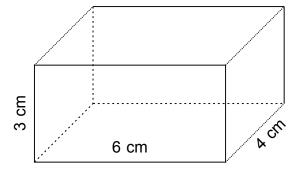
449.

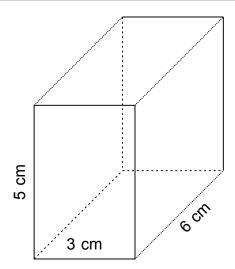


450.

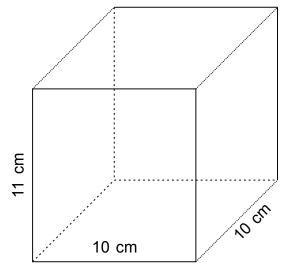


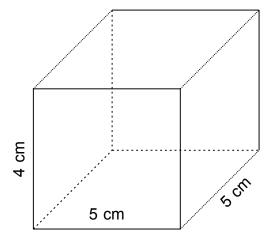
Find the volume and surface area of each shape.

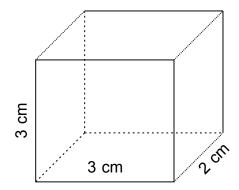




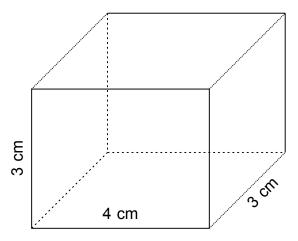
453.

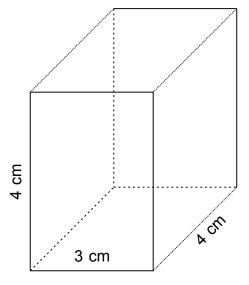


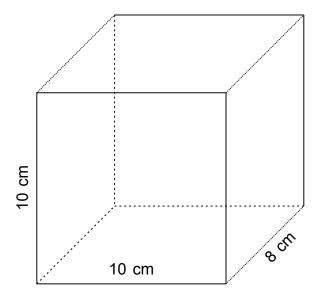




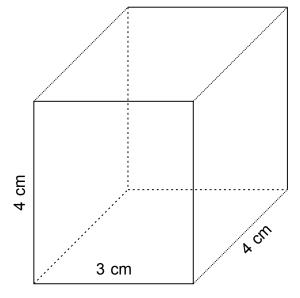
456.

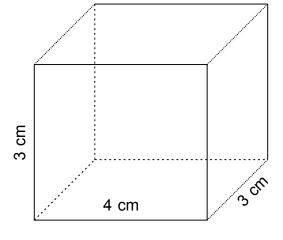






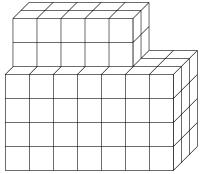
459.



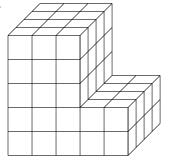


Determine the number of cubes.

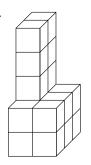
461.



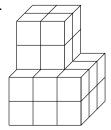
462.



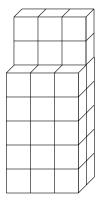
463.



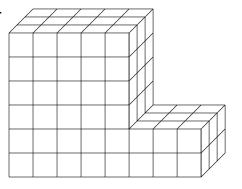
464.



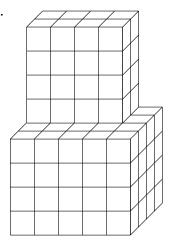
465.

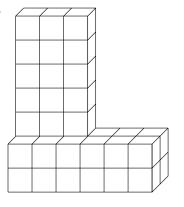


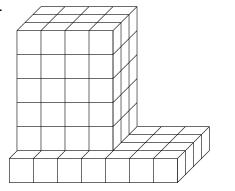
466.



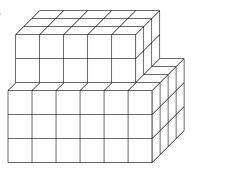
467.



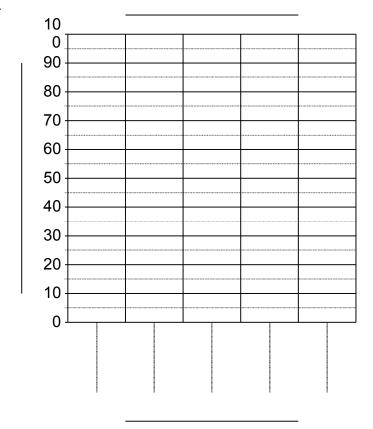




470.



Complete the graph.

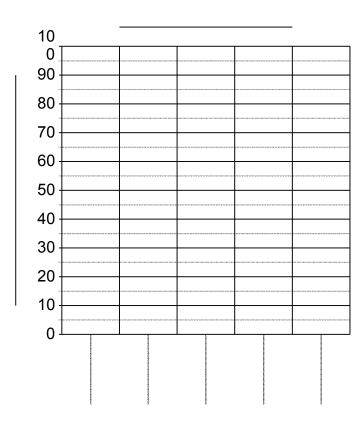


Graph Title

X-Axis Title	Y-Axis Title
Peaches	29
Apples	50
Pears	61
Oranges	61
Plums	45

Complete the graph.

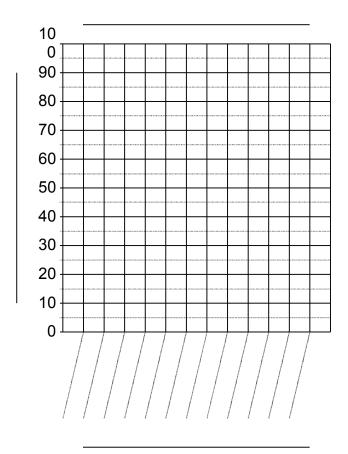
472.



Graph Title

X-Axis Title	Y-Axis Title
Peaches	22
Apples	35
Pears	59
Oranges	73
Plums	43

Complete the graph.

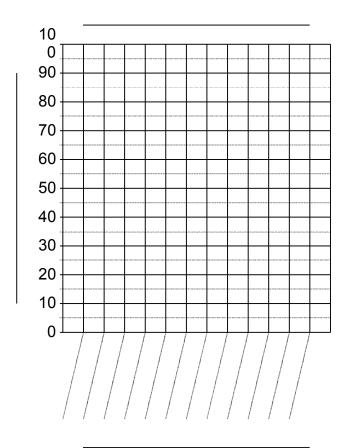


Graph Title

X-Axis Title	Y-Axis Title
January	13
February	28
March	41
April	45
May	82
June	100
July	100
August	98
September	88
October	64
November	36
December	10

Complete the graph.

474.



Graph Title

X-Axis Title	Y-Axis Title
January	24
February	25
March	34
April	44
May	46
June	46
July	46
August	42
September	40
October	34
November	17
December	10

km

Convert the given measures to new units.

475. 13 km = mm	476. 40 km = <u>m</u>
477. 30 mm = <u>km</u>	478. 92 km =
479. 18 cm = <u>km</u>	480. 57 mm = <u>m</u>
481. 57 km =mm	482. 41 cm = <u>m</u>
483. 12 m = <u>km</u>	484. 42 cm = <u>km</u>
485. 82 km = <u>cm</u>	486. 47 cm =mm
487. 27 mm = <u>km</u>	488. 82 m = <u>km</u>
489. 82 mm = <u>km</u>	490. 27 m = <u>cm</u>
491. 10 m = <u>km</u>	492. 78 mm = <u>km</u>

493. 35 m = <u>km</u> 494. 57 m = ____

Convert the given measures to new units.

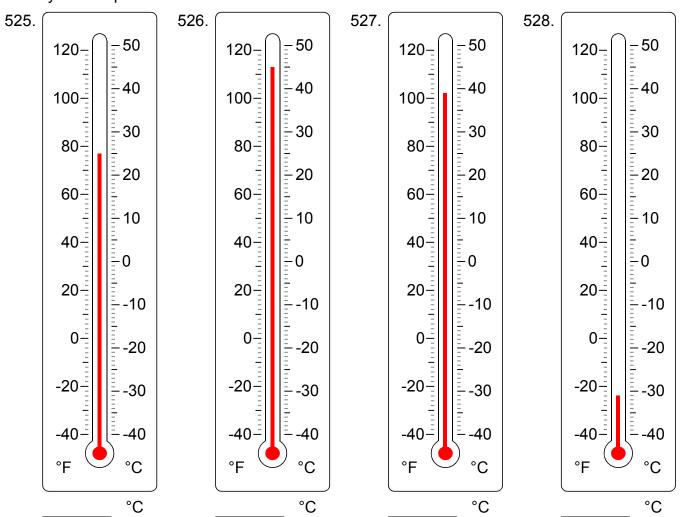
Convert the given measures to new units.

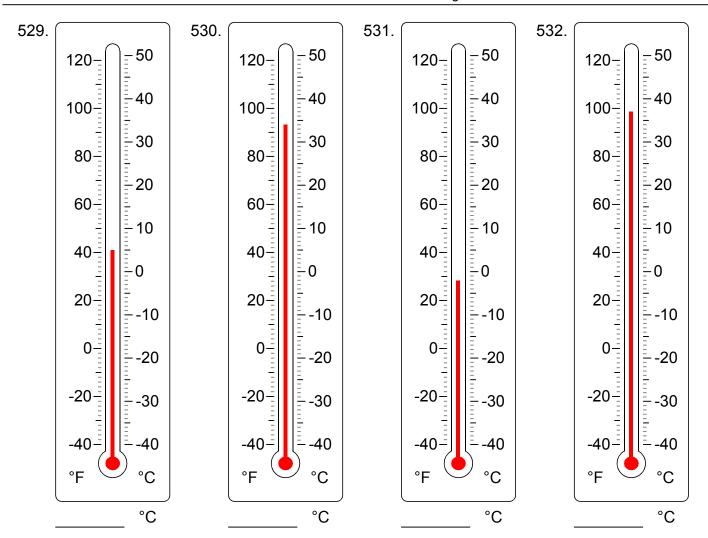
Convert the given measures to new units.

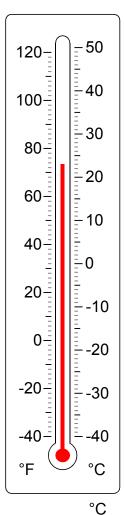
515.
$$31 \text{ kg} = \underline{t} \quad 516. \quad 50 \text{ t} = \underline{kg}$$

519.
$$61 \text{ kg} = \text{t} \quad 520. \quad 34 \text{ t} = \text{kg}$$

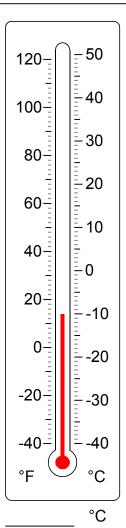
Identify the temperature for each thermometer.







534.



Calculate the powers below.

$$535. \ 21^3 =$$

$$536.9^3 =$$

535.
$$21^3 =$$
 536. $9^3 =$ 537. $2^4 =$ 538. $22^3 =$

539.
$$11^4 =$$
 540. $2^2 =$ 541. $2^3 =$ 542. $10^4 =$

$$541. \ 2^3 =$$

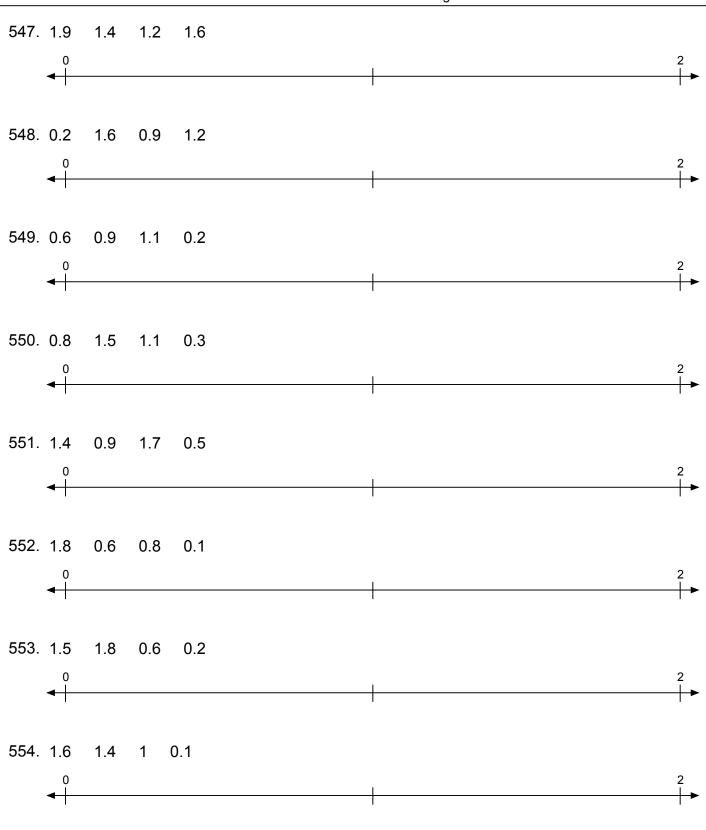
Identify where each set of points should be placed on the number lines below.

545. 0.7 0.9 1.7 0.5



546. 0.9 0.5 1.1 1.6





Identify where each set of points should be placed on the number lines below.

555. $\frac{7}{8}$ $1\frac{3}{8}$ $\frac{1}{8}$ $1\frac{7}{8}$







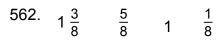




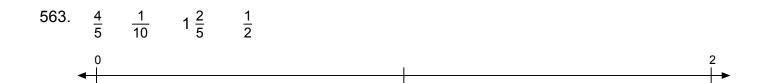
560.
$$\frac{7}{8}$$
 $\frac{1}{2}$ $1\frac{3}{8}$ $\frac{1}{8}$

561.
$$\frac{2}{5}$$
 1 $\frac{4}{5}$ $\frac{1}{10}$ 1

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Identify where each set of points should be placed on the number lines below.

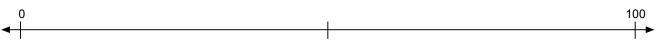
565. 30, 95, 50, 60



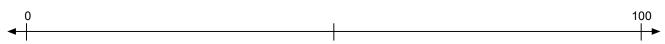
566. 55, 70, 20, 5



567. 50, 10, 55, 30

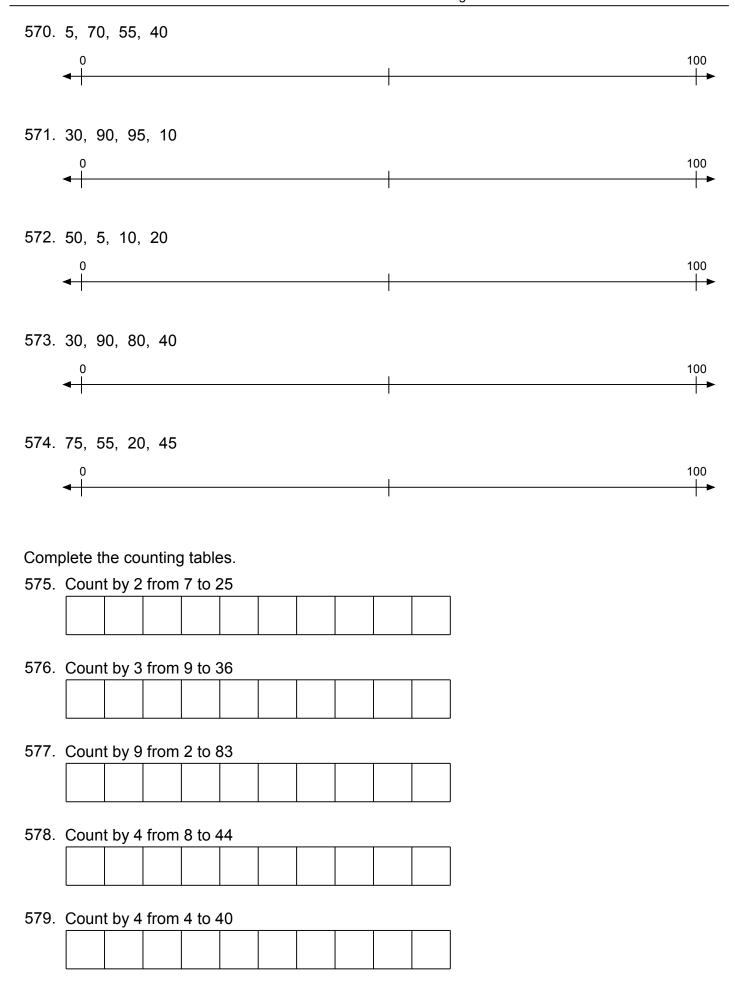


568. 20, 85, 65, 15



569. 65, 75, 50, 30





580.	Coun	t by 6	from	5 to :	59										
		<u> </u>		I	1	l				l	_				
581.	Coun	t by 4	from	6 to 4	42 						٦				
582.	Coun	t by 9	from	1 to 8	82										
											╛				
583.	Coun	t by 3	from	5 to 3	32 						٦				
584.	Coun	t by 4	from	3 to 3	39										
											_				
Write	each	value	in wo	ords.											
585.	2,028	B													
586.	7,465	;													
	6,872														
588.	9,788	·													
589.	2,372	·													
	4,382														
591.	8,376	·													
592.	2,400														
	5,359														
594 .	4,007														
Provi	de the	stan	dard r	notati	on for	each	value	Э.							
595.		_ foui	thou	sand	sever	n hund	dred f	ifty-ni	ne						

one thousand seven hundred ninety-one

597. five thousand three hundred eleven

598. two hundred

599. ____ five thousand three hundred forty-one

600. two thousand eight hundred ninety-three

601. two hundred three

602. six thousand two hundred sixty-eight

603. nine thousand six hundred eighty-nine

604. two thousand four hundred twenty-nine

Order the numbers.

605. 827	606. 424	607. 167	608. 786	609. 156
975	955	963	752	441
102	888	771	999	294
514	629	770	441	715
428	787	817	619	987
216	954	432	436	459

Convert.

615.
$$63\frac{1}{4}\% =$$

615.
$$63\frac{1}{4}\% =$$
 616. $88\% =$ 617. $31\frac{2}{5}\% =$

618.
$$11\frac{5}{10}\% =$$

619.
$$68\frac{3}{4}\% =$$

618.
$$11\frac{5}{10}\% =$$
 619. $68\frac{3}{4}\% =$ 620. $18\frac{4}{5}\% =$

621.
$$97\frac{7}{10}\% =$$

622.
$$79\frac{1}{2}\% =$$

621.
$$97\frac{7}{10}\% =$$
 622. $79\frac{1}{2}\% =$ 623. $89\frac{1}{2}\% =$

624.
$$38\frac{3}{5}\% =$$

Convert each decimal to a percentage.

Convert each percentage to a decimal and vice versa.

635.
$$19\frac{1}{4}\% =$$

635.
$$19\frac{1}{4}\% =$$
 636. $64\frac{3}{10}\% =$

641.
$$32\frac{2}{5}\% =$$
 642. $7\frac{2}{4}\% =$ 643. $81\frac{1}{10}\% =$

642.
$$7\frac{2}{4}\% =$$

643. 81
$$\frac{1}{10}$$
% =

644. 88
$$\frac{4}{5}$$
% = _____

Calculate the given percent of each value.

Calculate the given percent of each value.

Provide the conversions for each ratio.

665.

	Ratio	Fractio n	Percent	Decima I
a.	1:3			
b.	3:5			
C.	7:7			
d.	5:8			
e.	8:10			
f.	8:9			
g.	6:10			
h.	1:6			
i.	1:10			
j.	2:3			

666.

	Ratio	Fractio n	Percent	Decima I
a.	3:7			
b.	2:4			
C.	1:7			
d.	8:8			
e.	1:3			
f.	1:4			
g.	1:6			
h.	3:6			
i.	3:5			
j.	4:5			

Complete the table.

667.

+	6	9	1	3	2
8					
5					
6					
4					
3					

668.

+	1	5	7	3	4
4					
6					
3					
2					
8					

Complete the table.

669.

÷	80	59	92	85	54
7					
5					
6					
4					
2					

÷	59	35	28	45	77
8					
7					
4					
3					
2					

Complete the table.

671.

×	2	4	11	8	5
3					
7					
2					
10					
4					

672.

×	6	2	3	11	4
4					
9					
2					
12					
5					

Complete the table.

673.

_	16	13	15	17	10
2					
6					
9					
7					
8					

674.

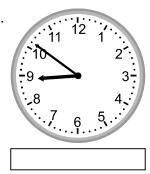
•	-	16	14	17	15	18
	8					
	2					
	9					
	4					
	3					

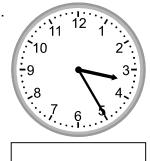
Show the time for each clock.

675.



676.







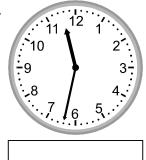
679.



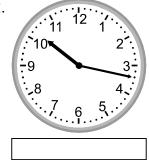
680.



681.



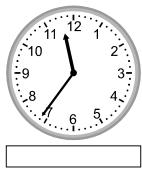
682.



683.



684.

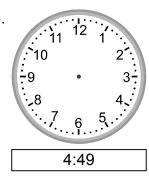


Show the time for each clock.

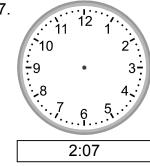
685.



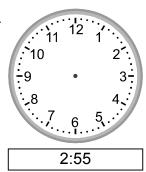
686.



687.

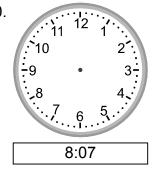


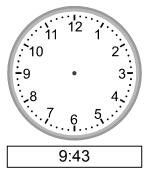
688.



689.



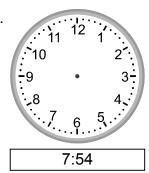




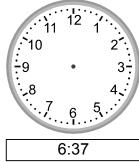
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693.



694.

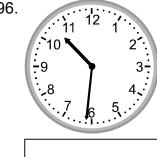


Show the time for each clock.

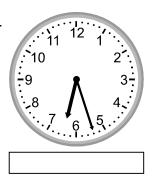
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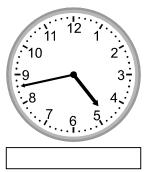
696.



697.



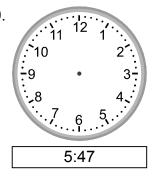
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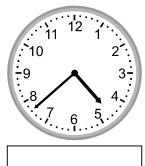
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700.

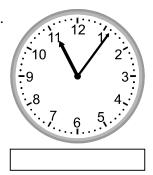


701.



702.



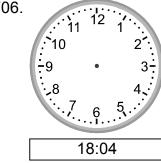


Show the time for each clock.

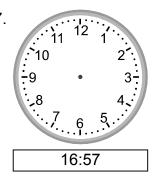
705.



706.



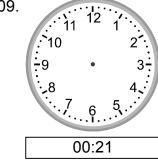
707.



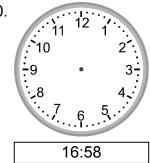
708.



709.



710.



711.

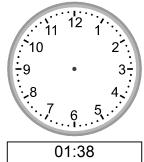


712.



713.



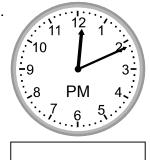


Show the time for each clock.

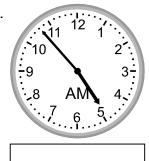
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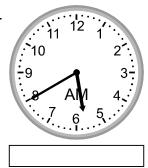
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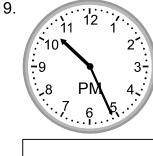
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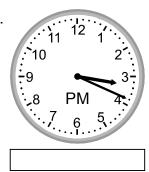
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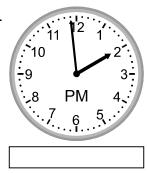
719.



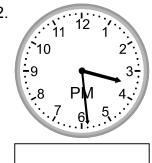
720.



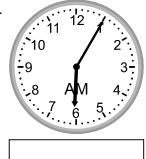
721.

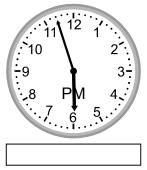


722.



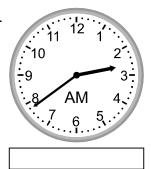
723.



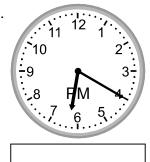


Show the time for each clock.

725.



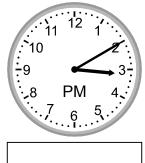
726.



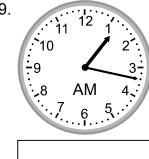
727.



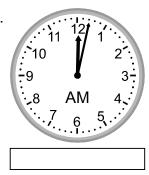
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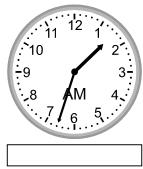
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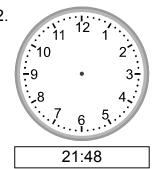
730.



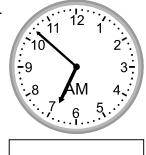
731.



732.



733.



734.

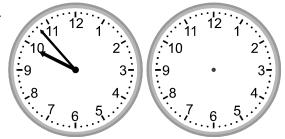


Convert the given measures of time to alternate measures of time.

744. 29 hr =

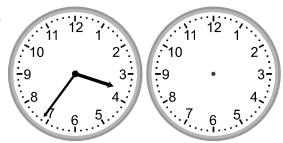
Draw the clock hands to show the passage of time.

745.



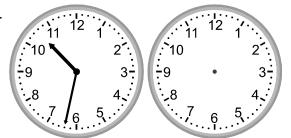
What time will it be in 4 hours 11 minutes?

746.



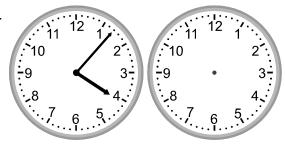
What time will it be in 2 hours 17 minutes?

747.



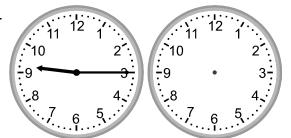
What time will it be in 3 hours 19 minutes?

748.



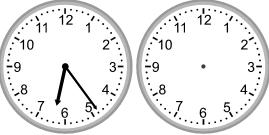
What time will it be in 4 hours 26 minutes?

749.



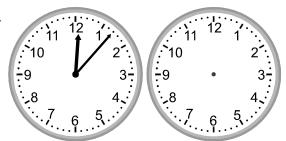
What time will it be in 1 hour 42 minutes?

750.



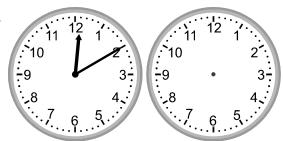
What time will it be in 1 hour 1 minute?

751.



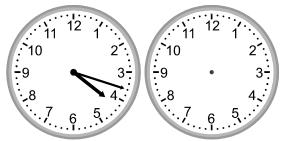
What time will it be in 1 hour 31 minutes?

752.

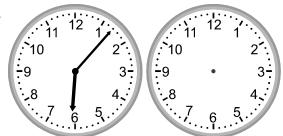


What time will it be in 3 hours 9 minutes?





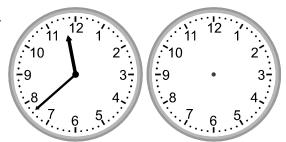
What time will it be in 3 hours 43 minutes?



What time will it be in 5 hours 51 minutes?

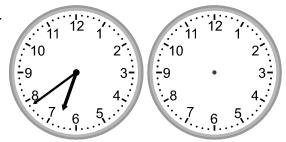
Draw the clock hands to show the passage of time.

755.



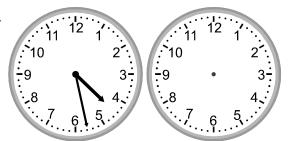
What time was it 5 hours 10 minutes ago?

756.



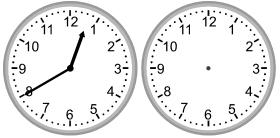
What time was it 2 hours 26 minutes ago?

757.



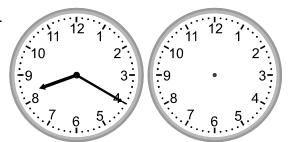
What time was it 5 hours 3 minutes ago?

758.

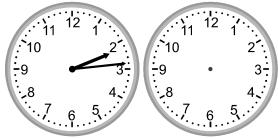


What time was it 5 hours 46 minutes ago?

759.

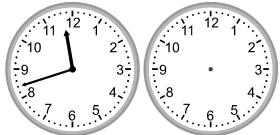


What time was it 1 hour 35 minutes ago?



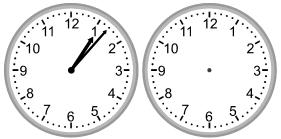
What time was it 3 hours 26 minutes ago?





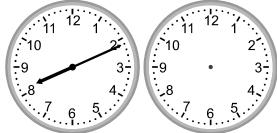
What time was it 4 hours 15 minutes ago?

762.



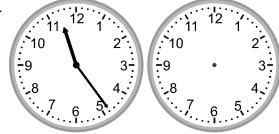
What time was it 4 hours 40 minutes ago?

763.



What time was it 2 hours 19 minutes ago?

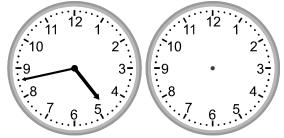
764.



What time was it 5 hours 19 minutes ago?

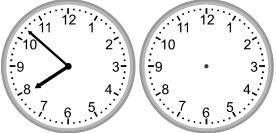
Draw the clock hands to show the passage of time.

765.



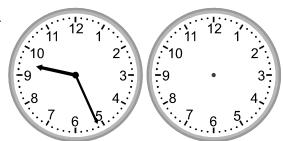
What time was it 1 hour 49 minutes ago?

766.



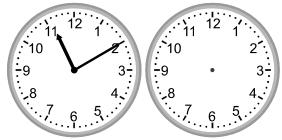
What time will it be in 4 hours 19 minutes?

767.



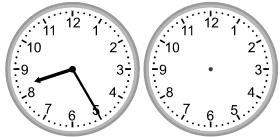
What time was it 2 hours 48 minutes ago?

768.

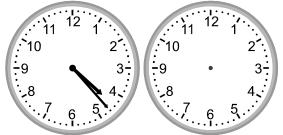


What time was it 2 hours 40 minutes ago?



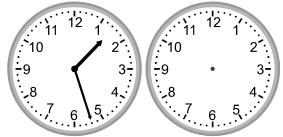


What time was it 2 hours 26 minutes ago?



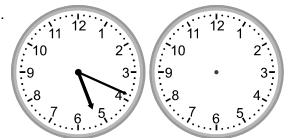
What time will it be in 4 hours 13 minutes?

773.



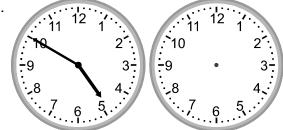
What time was it 2 hours 53 minutes ago?

770.

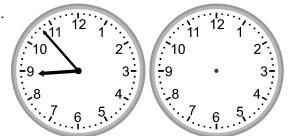


What time will it be in 1 hour 50 minutes?

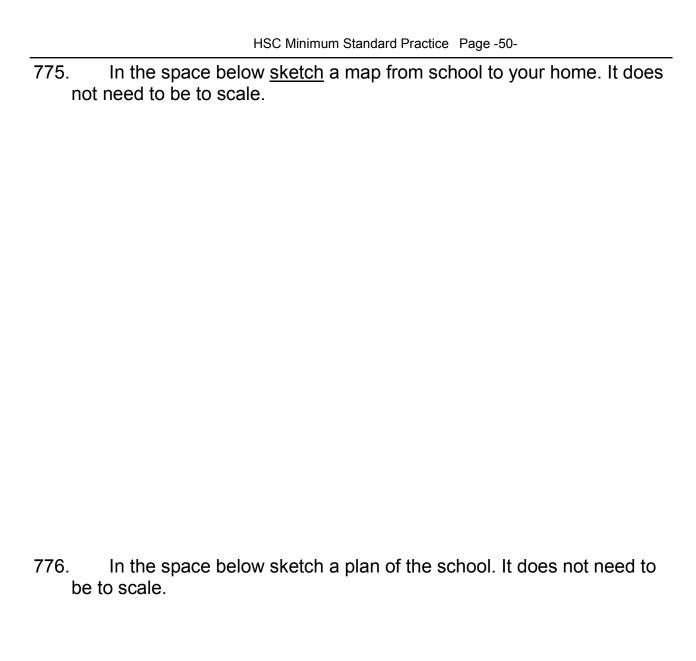
772.



What time was it 4 hours 10 minutes ago?



What time will it be in 4 hours 21 minutes?



Chance

777. What is the probability (chance) of tossing a coin and it showing heads?

778. What is the probability (chance) of rolling a die and it showing a 5?

779. A hat contains 5 red and 4 green discs. What is the probability (chance) of drawing a green disc?

780. A standard deck of cards contains 52 cards. What is the probability of randomly drawing an Ace Of Spades from the deck?

781. On the number line below, show the location of probabilities which can be described as; certain, unlikely, likely, impossible and even.



Rates Of Application

	The walls of a room are to be painted with two coats of paint. The of the walls is $25m^2$. Correct application of the paint requires 100mL of per square metre. Calculate how many litres of paint will be required.
-	
-	
	A front lawn has an area of 225m ² . A pesticide to remove weeds is yed onto the lawn at a rate of 50mL per square metre. How much pesti-is required to complete the task?
-	
-	
bags	It's spring time and the lawn is to be fertilised with a powdered food rass. The fertiliser is to be spread at a rate of 50g per square metre. The of fertiliser are 10kg. How many square metres of lawn will be fertilised 2 bags of lawn food?
-	

785. Draw the named shapes in the boxes below.

Equilateral Triangle	Isosceles Triangle	Right Triangle	Scalene Triangle

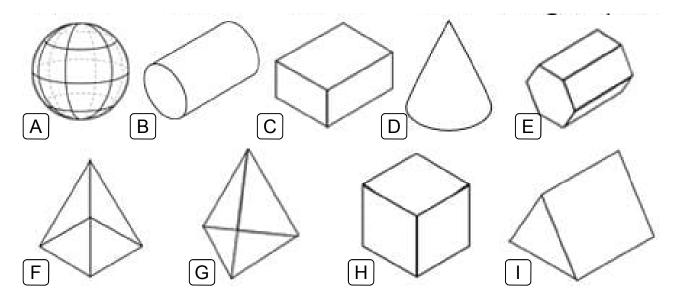
786. Draw the named shapes in the boxes below.

Square	Rectangle	Circle	Semi-Circle

787. Draw the named shapes in the boxes below.

Pentagon	Hexagon	Octagon	Trapezium

788. Name the solids shown below.



- A) _____
- C) _____
- E) _____
- G) _____
- l) _____

- B) _____
- D) _____
- F) _____
- H) _____

789. Below is a table with the ingredients for a recipe which is able to feed 4 people. The other columns are blank. Fill in the table to allow the recipe to feed the number given.

Ingredients	4 people	2 people	3 people	5 people	6 people
Spiral Pasta	500g				
Minced Meat (beef or chicken)	400g				
Pasta Sauce	350mL				
Parmesan Cheese	150g				
Olive Oil	2 tbsp*				

^{*} tbsp = table spoon.

790. Below is a sign showing the costs of parking in the Toowong Village & Tower parking station. Read the sign carefully and answer the

questions shown to the right of the sign.

PARKING R	ATES
TIME	RATE
0 - 2.0 hrs	FREE
2.0 - 2.5 hrs	\$ 2.00
2.5 - 3.0 hrs	\$ 3.00
3.0 - 3.5 hrs	\$ 4.00
3.5 - 4.0 hrs	\$ 6.00
4.0 - 4.5 hrs	\$ 10.00
4.5 - 5.0 hrs	\$ 15.00
5.0 - 5.5 hrs	\$20.00
5.5 - 6.0 hrs	\$ 25.00
6.0 - 6.5 hrs	\$ 35.00
6.5 - 7.0 hrs	\$40.00
7+ hrs	\$ 49.00
Midnight - 7am	\$ 20.00
Staff (parked in allocated	\$ 4.00
staff parking area)	per day

a)	What is the cost of parking for 3
	hours?

o)	How much does a staff member
	pay for 7 hours of parking?

c)	A person parks from 8pm until 7am and pays by credit card. What is the total cost?

791. Below is a map of Southern Florida. Use the map to answer the questions.



a) What is the name of the northernmost city?

b) What is the name of the westernmost city?

c) Use the scale on the map to estimate the distance between Key West and Naples in miles and kilometres.

792. Below is a detailed map of Miami Beach. Use the map to answer the questions.



a) In what direction does 11th street run?

b) What is the direction of the police station from the Lifeguard tower?

c) Which is closer to the toilets, the police station or The Edge theater?

d) Using the scale, how far is the Kenmore Hotel from the Cardozo Hotel?

Find the sum.

Find the sum.

Find the quotient.

22.
$$\frac{3}{4\sqrt{12}}$$
 23. $\frac{6}{4\sqrt{24}}$ 24. $\frac{4}{8\sqrt{32}}$ 25. $\frac{8}{1\sqrt{8}}$ 26. $\frac{2}{5\sqrt{10}}$ 27. $\frac{3}{1\sqrt{3}}$ 28. $\frac{3}{3}$

29.
$$\frac{7}{3\sqrt{21}}$$
 30. $\frac{1}{8\sqrt{8}}$

Find the product.

Find the product.

46.
$$24$$
 $\times 42$
 1.008

48. 54
$$\times$$
 73 $3,942$

49. 60 50. 61
$$\times$$
 14 \times 29 \times 1,769

Find the difference.

Find the difference.

Find the sum.

Solve.

81. Two apples are in the basket. Four more apples are put in the basket. How many apples are in the basket now?

6

82. Two red plums and two green plums are in the basket. How many plums are in the basket?

4

83. Eight peaches were in the basket. More peaches were added to the basket. Now there are 16 peaches. How many peaches were added to the basket?

8

84.	Some oranges were in the basket. Nine more oranges were added to the basket. Now there are 12 oranges. How many oranges were in the basket before more oranges were added?
85.	Paul has seven pears and David has six pears. How many pears do Paul and David have
	together? 13
86.	Marin has eight more marbles than Marin. Marin has nine marbles. How many marbles does Marin have?
	17
87.	Eight balls were in the basket. Five are red and the rest are green. How many balls are green?
	3
88.	Paul has eight pears and Allan has two pears. How many pears do Paul and Allan have together?
	10
89.	11 apples were in the basket. Three are red and the rest are green. How many apples are green?
	8
90.	Six red oranges and five green oranges are in the basket. How many oranges are in the basket?
	11
Solv	ve.
91.	You have 54 balls and want to share them equally with six people. How many balls would each person get?
	9
92.	Jake is reading a book with 40 pages. If Jake wants to read the same number of pages every day, how many pages would Jake have to read each day to finish in five days?
	8
93.	How many three cm pieces of rope can you cut from a rope that is 18 cm long?

94.	A box of oranges weighs 35 pounds. If one orange weighs five pounds, how many oranges are there in the box?
95.	Jennifer made 72 cookies for a bake sale. She put the cookies in bags, with eight cookies in each bag. How many bags did she have for the bake sale?
96.	Audrey ordered seven pizzas. The bill for the pizzas came to \$21. What was the cost of each pizza?
	3
97.	Donald is reading a book with 21 pages. If Donald wants to read the same number of pages every day, how many pages would Donald have to read each day to finish in seven days?
	3
98.	A box of oranges weighs 12 pounds. If one orange weighs six pounds, how many oranges are there in the box?
	2
99.	Paul ordered nine pizzas. The bill for the pizzas came to \$36. What was the cost of each pizza?
	4
100.	Amy made 32 cookies for a bake sale. She put the cookies in bags, with four cookies in each bag. How many bags did she have for the bake sale?
	8
Solve	2 .
101.	Janet's garden has six rows of pumpkins. Each row has three pumpkins. How many pumpkins does Janet have in all?
	18
102.	Allan can cycle two miles per hour. How far can Allan cycle in three hours?
103.	Jake swims two laps every day. How many laps will Jake swim in five days?
	10

104.	If there are nine marbles in each box and there are eight boxes, how many marbles are there in total?
	72
105.	Steven has nine times more balls than Billy. Billy has two balls. How many balls does Steven have?
	18
106.	Marcie's garden has three rows of pumpkins. Each row has six pumpkins. How many pumpkins does Marcie have in all?
	18
107.	Steven can cycle nine miles per hour. How far can Steven cycle in three hours?
108.	Michele has three times more apples than Donald. Donald has seven apples. How many apples does Michele have?
	21
109.	If there are five peaches in each box and there are seven boxes, how many peaches are there in total?
	35
110.	Jackie swims six laps every day. How many laps will Jackie swim in two days?
Solve	9 .
111.	Marcie has zero fewer oranges than Janet. Janet has eight oranges. How many oranges does Marcie have?
	8
112.	Some apples were in the basket. Two apples were taken from the basket. Now there are zero apples. How many apples were in the basket before some of the apples were taken?
	2
113.	Seven pears are in the basket. Four are red and the rest are green. How many pears are green?
	3

114. Eight plums were in the basket. Some of the plums were removed from the basket. Now there are five plums. How many plums were removed from the basket?

3

115. Three balls are in the basket. Two balls are taken out of the basket. How many balls are in the basket now?

116. Donald has seven peaches. Brian has eight peaches. How many more peaches does Brian have than Donald?

117. Six marbles are in the basket. Two marbles are taken out of the basket. How many marbles are in the basket now?

118. Some pears were in the basket. Four pears were taken from the basket. Now there are two pears. How many pears were in the basket before some of the pears were taken?

119. Two apples are in the basket. Two are red and the rest are green. How many apples are green?

120. Sharon has one fewer ball than Marcie. Marcie has six balls. How many balls does Sharon have?

Find the solution.

122.
$$5(5 + 8) = 6$$

123.
$$(9+9)^2 = 324$$
 124. $4+4+3+1=12$

125.
$$(8+3) \times (1+4) = 55$$

127.
$$6 + 1^2 + 8 + 1^2 = 16$$

128.
$$(5+8)^2 + (2+7)^2 = 250$$

129.
$$5+5+8+6=24$$

130.
$$(6+6)^2 + (2+2)^2 = 160$$

131.
$$7 \times (8 + 2) = 70$$

131.
$$7 \times (8+2) = \frac{70}{1}$$
 132. $(3+5) \times (5+2) = \frac{56}{1}$

133.
$$(7+6)^2 + (1+6)^2 = 218$$

134.
$$(4 + 3)(5 + 6) = 77$$

135.
$$(7 + 2) \times (3 + 2) = 45$$

136.
$$(5+5)(9+1) = 100$$

137.
$$7 + 6^2 = 43$$

138.
$$3 \times 5 + 8 = 23$$

139.
$$(5 + 7)^2 + (4 + 2)^2 = 180$$

140.
$$(1 + 9) \div 7 = 1.429$$

142.
$$1 \times 1 + 8 = 9$$

143.
$$(2 + 4) \div 4 = 1.5$$

144.
$$(2 + 8) \div 4 = 2.5$$

146.
$$(4+4)^2 + (5+7)^2 = 208$$

147.
$$(7^2) \times (8^2) + 7 = 3,143$$

148.
$$5 + 6^2 = 41$$

149.
$$(3+1) \times (4+2) = 24$$

150.
$$(9^2) \times (6^2) + 4 = 2,920$$

151.
$$3 + 4^2 + 8 + 6^2 = 63$$

152.
$$2 + 4 + 3 + 1 = 10$$

153.
$$6 \times 3 \times 5 = 90$$

154.
$$6 \times 5 \times 8 = 240$$

155.
$$(8 + 5)(9 + 4) = 169$$

156.
$$(3+1)^2 + (7+4)^2 = 137$$

157.
$$3 + 9^2 + 3 + 2^2 = 91$$

158.
$$(1+7)^2 + (1+5)^2 = 100$$

160.
$$5 \times (1 + 1) = 10$$

161.
$$3 + 9^2 = 84$$

162.
$$(9^2) \times (2^2) + 4 = 328$$

163.
$$(1 + 4) \div 3 = 1.667$$

164.
$$(1+1)(8+5) = 26$$

166.
$$7 \times 5 + 6 = 41$$

167.
$$9 \times (2 + 9) = 99$$

$$168. \ \ 4+1+4+5=14$$

169.
$$1 \times 2 + 4 = 6$$

170.
$$(1+8)^2 + (7+3)^2 = 181$$

171.
$$(7+5)^2 + (6+4)^2 = 244$$

172.
$$3 \times 9 + 4 = 31$$

173.
$$4 + 8^2 = 68$$

174.
$$6 \times (2 + 1) = \frac{18}{1}$$

175.
$$(3+3)^2 + (5+1)^2 = 72$$

176.
$$2 + 8 + 3 + 2 = 15$$

177.
$$(5+9)^2 = 196$$

178.
$$1 \times (9 + 9) = 18$$

179.
$$6 + 7 + 3 + 8 = 24$$

180.
$$(1+2)^2 = 9$$

183.
$$(4 + 6) \div 3 = 3.333$$

184.
$$6 \times (3+3) = \frac{36}{3}$$

$$187. \ \ (3+5)^2 = 64$$

189.
$$4(7+4) = 44$$

190.
$$(6 + 3)^2 = 81$$

192.
$$(5^2) \times (9^2) + 8 = 2,033$$

194.
$$3 + 7^2 = 52$$

195.
$$(4+7)(9+9) = 198$$

196.
$$(6+8) \times (7+1) = 112$$

197.
$$5 \times 4 \times 7 = 140$$

198.
$$8 + 8^2 = 72$$

200.
$$8 \times 9 \times 7 = 504$$

201.
$$1 + 9^2 = 82$$

202.
$$(7^2) \times (4^2) + 2 = 786$$

203.
$$(1 + 5) \div 8 = 0.75$$

204.
$$2 + 2^2 + 4 + 7^2 = 59$$

206.
$$5 + 8^2 = 69$$

207.
$$(3+6)^2 = 81$$

208.
$$9 + 4^2 = 25$$

210.
$$(1+6)(3+9) = 84$$

211.
$$9 + 5 - 6 + 2 = 10$$

212.
$$(7 \times 7) - (3 + 8) = 38$$

213.
$$8 + 1^2 + 9 + 5^2 = 43$$

214.
$$(9 \times 1) - (7 + 6) = -4$$

215.
$$1(3+1)=4$$

216.
$$(8 + 3) \div 1 = 11$$

217.
$$(7 \times 2) - (2 + 6) = 6$$

218.
$$6 \times 6 + 8 = 44$$

219.
$$(5^2) \times (5^2) + 3 = 628$$

220.
$$9 \times 2 \times 5 = 90$$

Solve the following.

221. Sandra baby-sat for 14 hours over two weeks. She earned \$4.00 an hour. What was her gross pay?

\$56.00

222. How much will Sharon earn if she earns \$4.80 for each hour worked, works 47 hours, and has payroll deductions of \$65.42?

\$160.18

223. How much will Brian earn if he earns \$8.20 per hour and works 30 hours?

\$246.00

224. Marin's gross pay is \$284.20. After deductions of 27% what is her net pay?

\$207.47

225. If Paul earns \$176.40 after deductions of \$75.60 and after working 21 hours what is the hourly rate?

\$12.00

226. If Amy earns \$253.80 after working 47 hours what is the hourly rate?

\$5.40

227. Steven's net pay is \$245.86 after deductions of \$73.44. He makes \$10.30 per hour. How many hours did he work?

31 hours

228. What is Adam's net pay if he earns \$4.50 for each hour worked, works 11 hours, and has payroll deductions of 20%?

\$39.60

229. Janet's gross pay is \$288.60. After deductions of 23% what is her net pay?

\$222.22

230. If Jennifer earns \$232.30 after working 23 hours what is the hourly rate?

\$10.10

231. How much will David earn if he earns \$14.10 per hour and works 50 hours?

\$705.00

232. What is Paul's net pay if he earns \$12.90 for each hour worked, works 28 hours, and has payroll deductions of 20%?

\$288.96

233. If Adam earns \$153.09 after deductions of \$65.61 and after working 27 hours what is the hourly rate?

\$8.10

234. Ellen baby-sat for 18 hours over two weeks. She earned \$4.80 an hour. What was her gross pay?

\$86.40

235. Brian's net pay is \$195.99 after deductions of \$31.91. He makes \$5.30 per hour. How many hours did he work?

43 hours

236. How much will Marin earn if she earns \$11.00 for each hour worked, works 31 hours, and has payroll deductions of \$34.10?

\$306.90

237. If Billy earns \$263.25 after deductions of \$74.25 and after working 25 hours what is the hourly rate?

\$13.50

238. If Amy earns \$569.80 after working 37 hours what is the hourly rate?

\$15.40

239. Jackie's gross pay is \$152.00. After deductions of 19% what is her net pay?

\$123.12

240. How much will Paul earn if he earns \$15.10 per hour and works 46 hours?

\$694.60

Express the currency values in words.

241. \$38.94 thirty-eight dollars ninety-four cents

242. \$61.42 sixty-one dollars forty-two cents

243. \$3.32 three dollars thirty-two cents

244. \$77.17 seventy-seven dollars seventeen cents
245. \$94.58 ninety-four dollars fifty-eight cents
246. \$63.10 sixty-three dollars ten cents
247. \$86.58 eighty-six dollars fifty-eight cents
248. \$90.85 ninety dollars eighty-five cents
249. \$19.97 <u>nineteen dollars ninety-seven cents</u>
250. \$48.86 forty-eight dollars eighty-six cents

Solve.

hot dog = \$1.20	cola = \$1.00	
order of French-fries = \$0.70	ice cream cone = \$1.30	
hamburger = \$2.40	milk shake = \$2.80	
deluxe cheeseburger = \$3.20	taco = \$2.60	

- 251. \$\frac{\\$6.70}{\} If Marin wanted to buy a deluxe cheeseburger, a milk shake, and an order of Frenchfries, how much would it cost her?
- 252. \$2.40 Steven wants to buy a hamburger. How much will it cost him?
- 253. <u>\$5.40</u> Ellen purchases an ice cream cone, a taco, and an order of French-fries. How much change will she get back from \$10.00?
- 254. \$3.57 What is the total cost of a hamburger and a cola if the sales tax is five percent?
- 255. \$7.60 If Allan buys a hamburger, how much money will he get back if he pays \$10.00?
- 256. \$\frac{\\$7.14}{\}\$ What is the total cost of a hamburger, a hot dog, and a deluxe cheeseburger if there is a 5% sales tax?
- 257. \$\frac{\\$5.36}{\}\$ What is the total cost of a milk shake, a cola, and an ice cream cone if there is a 5% sales tax?
- 258. \$3.80 If Donald wanted to buy a taco and a hot dog, how much would it cost him?
- 259. \$0.74 What is the total cost of an order of French-fries if the sales tax is five percent?
- 260. \$1.30 Brian wants to buy an ice cream cone. How much will it cost him?

Compare the fractions.

261.
$$\frac{5}{8} \ge \frac{2}{8}$$
 262. $\frac{3}{4} \ge \frac{1}{4}$ 263. $\frac{4}{5} \ge \frac{2}{5}$ 264. $\frac{2}{3} \ge \frac{1}{3}$ 265. $\frac{4}{6} \ge \frac{3}{6}$ 266. $\frac{1}{8} \le \frac{6}{8}$ 267. $\frac{2}{6} \le \frac{5}{6}$

268.
$$\frac{3}{5} = \frac{3}{5}$$
 269. $\frac{1}{3} = \frac{1}{3}$ 270. $\frac{1}{5} < \frac{2}{5}$

Compare the fractions.

271.
$$\frac{1}{5} < \frac{3}{4}$$
 272. $\frac{1}{8} < \frac{2}{3}$ 273. $\frac{2}{3} < \frac{3}{4}$ 274. $\frac{1}{5} < \frac{7}{8}$ 275. $\frac{5}{6} > \frac{2}{5}$ 276. $\frac{1}{4} < \frac{2}{6}$ 277. $\frac{2}{3} > \frac{2}{8}$

278.
$$\frac{3}{5} < \frac{3}{4}$$
 279. $\frac{4}{6} > \frac{1}{3}$ 280. $\frac{2}{8} < \frac{2}{5}$

Divide.

281.
$$6 \div \frac{1}{5} = 30$$
 282. $7 \div \frac{2}{3} = 10\frac{1}{2}$ 283. $6 \div \frac{1}{6} = 36$ 284. $7 \div \frac{2}{4} = 14$

285.
$$8 \div \frac{1}{4} = 32$$
 286. $4 \div \frac{5}{6} = 4\frac{4}{5}$ 287. $5 \div \frac{2}{8} = 20$ 288. $5 \div \frac{1}{5} = 25$

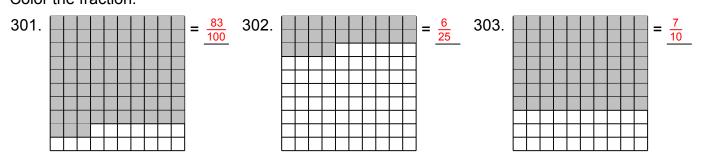
289.
$$1 \div \frac{2}{3} = \underbrace{1\frac{1}{2}}$$
 290. $5 \div \frac{1}{6} = \underline{30}$

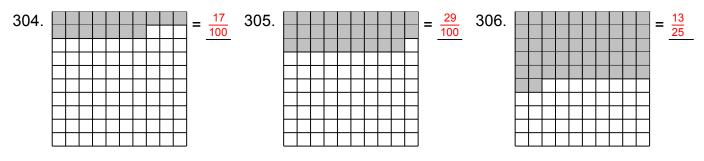
Complete the equivalent fractions.

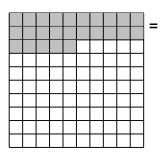
$$291. \ \ \frac{1}{5} = \frac{9}{45} \qquad 292. \ \ \frac{2}{3} = \frac{8}{12} \qquad 293. \ \ \frac{4}{8} = \frac{24}{48} \qquad 294. \ \ \frac{2}{4} = \frac{10}{20} \qquad 295. \ \ \frac{2}{4} = \frac{8}{16} \qquad 296. \ \ \frac{1}{6} = \frac{5}{30}$$

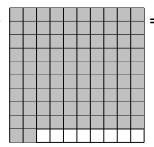
297.
$$\frac{1}{3} = \frac{6}{18}$$
 298. $\frac{3}{5} = \frac{21}{35}$ 299. $\frac{2}{8} = \frac{4}{16}$ 300. $\frac{1}{6} = \frac{9}{54}$

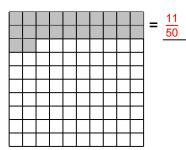
Color the fraction.



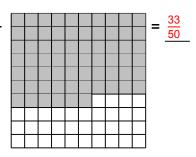








310.



Color the fraction.

314. $= \frac{2}{3}$ 315. $= \frac{2}{6}$

316.

 $=\frac{1}{3}$ 318.

 $= \frac{4}{5}$ 319.

Find the sum.

321.
$$\frac{2}{3} + \frac{2}{3} = 1\frac{1}{3}$$
 322. $\frac{1}{5} + \frac{4}{5} = 1$ 323. $\frac{2}{4} + \frac{1}{4} = \frac{3}{4}$ 324. $\frac{5}{8} + \frac{2}{8} = \frac{7}{8}$

322.
$$\frac{1}{5} + \frac{4}{5} = 1$$

$$323. \ \frac{2}{4} + \frac{1}{4} = \frac{3}{4}$$

$$324. \ \frac{5}{8} + \frac{2}{8} = \frac{7}{8}$$

325.
$$\frac{3}{6} + \frac{1}{6} = \frac{2}{3}$$
 326. $\frac{2}{8} + \frac{6}{8} = \frac{1}{2}$ 327. $\frac{3}{6} + \frac{4}{6} = \frac{1}{6}$ 328. $\frac{1}{4} + \frac{1}{4} = \frac{1}{2}$

326.
$$\frac{2}{8} + \frac{6}{8} = 1$$

327.
$$\frac{3}{6} + \frac{4}{6} = 1\frac{1}{6}$$

328.
$$\frac{1}{4} + \frac{1}{4} = \frac{1}{2}$$

$$329. \ \frac{4}{8} + \frac{2}{8} = \frac{3}{4}$$

329.
$$\frac{4}{8} + \frac{2}{8} = \frac{3}{4}$$
 330. $\frac{1}{5} + \frac{3}{5} = \frac{4}{5}$

Convert.

331.
$$\frac{2}{9} = 0.25$$

332.
$$\frac{2}{4} = 0.5$$

333.
$$\frac{1}{2} = 0.333$$

334.
$$\frac{3}{4} = 0.7$$

331.
$$\frac{2}{8} = 0.25$$
 332. $\frac{2}{4} = 0.5$ 333. $\frac{1}{3} = 0.333$ 334. $\frac{3}{4} = 0.75$ 335. $\frac{2}{6} = 0.333$

336.
$$\frac{5}{9} = 0.625$$

337.
$$\frac{1}{5} = 0.2$$

338.
$$\frac{2}{3} = 0.667$$

339.
$$\frac{4}{5} = 0.8$$

336.
$$\frac{5}{8} = 0.625$$
 337. $\frac{1}{5} = 0.2$ 338. $\frac{2}{3} = 0.667$ 339. $\frac{4}{5} = 0.8$ 340. $\frac{3}{8} = 0.375$

Find the product.

341.
$$\frac{1}{6} \times \frac{4}{6} = \frac{1}{9}$$
 342. $\frac{2}{6} \times \frac{4}{6} = \frac{2}{9}$ 343. $\frac{4}{8} \times \frac{3}{8} = \frac{3}{16}$ 344. $\frac{1}{5} \times \frac{1}{5} = \frac{1}{25}$ 345. $\frac{3}{4} \times \frac{1}{4} = \frac{3}{16}$

346.
$$\frac{1}{3} \times \frac{1}{3} = \frac{1}{9}$$
 347. $\frac{2}{4} \times \frac{3}{4} = \frac{3}{8}$ 348. $\frac{2}{5} \times \frac{4}{5} = \frac{8}{25}$ 349. $\frac{3}{6} \times \frac{4}{6} = \frac{1}{3}$ 350. $\frac{4}{8} \times \frac{4}{8} = \frac{1}{4}$

Find the difference.

351.
$$\frac{3}{4} - \frac{1}{4} = \frac{1}{2}$$
 352. $\frac{2}{3} - \frac{1}{3} = \frac{1}{3}$ 353. $\frac{4}{5} - \frac{2}{5} = \frac{2}{5}$ 354. $\frac{4}{8} - \frac{2}{8} = \frac{1}{4}$ 355. $\frac{5}{6} - \frac{4}{6} = \frac{1}{6}$

356.
$$\frac{4}{6} - \frac{1}{6} = \frac{1}{2}$$
 357. $\frac{3}{5} - \frac{1}{5} = \frac{2}{5}$ 358. $\frac{3}{4} - \frac{2}{4} = \frac{1}{4}$ 359. $\frac{7}{8} - \frac{3}{8} = \frac{1}{2}$ 360. $\frac{4}{5} - \frac{3}{5} = \frac{1}{5}$

Convert to improper fractions.

361.
$$1\frac{4}{6} = \frac{5}{3}$$
 362. $6\frac{6}{8} = \frac{27}{4}$ 363. $2\frac{1}{4} = \frac{9}{4}$ 364. $5\frac{2}{8} = \frac{21}{4}$ 365. $8\frac{1}{6} = \frac{49}{6}$ 366. $2\frac{2}{4} = \frac{5}{2}$

367.
$$5\frac{1}{5} = \frac{26}{5}$$
 368. $8\frac{7}{8} = \frac{71}{8}$ 369. $9\frac{1}{4} = \frac{37}{4}$ 370. $2\frac{4}{5} = \frac{14}{5}$

Calculate.

371.
$$7\frac{1}{8} + 2\frac{5}{8} = 9\frac{3}{4}$$
 372. $6\frac{1}{3} + 9\frac{2}{3} = 16$ 373. $7\frac{2}{5} + 2\frac{1}{5} = 9\frac{3}{5}$ 374. $5\frac{3}{4} + 2\frac{2}{4} = 8\frac{1}{4}$

375.
$$8\frac{4}{5} + 6\frac{1}{5} = \underline{15}$$
 376. $4\frac{6}{8} + 7\frac{6}{8} = \underline{12\frac{1}{2}}$ 377. $9\frac{3}{6} + 5\frac{1}{6} = \underline{14\frac{2}{3}}$ 378. $8\frac{3}{4} + 8\frac{1}{4} = \underline{17}$

379.
$$4\frac{1}{3} + 7\frac{2}{3} = 12$$
 380. $2\frac{7}{8} + 9\frac{2}{8} = 12\frac{1}{8}$

Multiply.

381.
$$\frac{4}{6}$$
 of $8 = \frac{5\frac{1}{3}}{3}$ 382. $\frac{4}{5}$ of $8 = \frac{6\frac{2}{5}}{5}$ 383. $\frac{6}{8}$ of $6 = \frac{4\frac{1}{2}}{2}$ 384. $\frac{2}{8}$ of $6 = \frac{1\frac{1}{2}}{2}$

385.
$$\frac{2}{3}$$
 of $6 = \frac{4}{6}$ 386. $\frac{2}{6}$ of $2 = \frac{2}{3}$ 387. $\frac{3}{5}$ of $2 = \frac{11}{5}$ 388. $\frac{1}{4}$ of $1 = \frac{1}{4}$

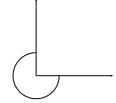
389.
$$\frac{1}{4}$$
 of $3 = \frac{3}{4}$ 390. $\frac{3}{8}$ of $6 = \frac{2\frac{1}{4}}{4}$

Simplify the fractions.

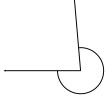
$$391. \ \ \frac{32}{40} = \frac{4}{5} \qquad 392. \ \ \frac{4}{12} = \frac{1}{3} \qquad 393. \ \ \frac{4}{32} = \frac{1}{8} \qquad 394. \ \ \frac{12}{16} = \frac{3}{4} \qquad 395. \ \ \frac{8}{24} = \frac{1}{3} \qquad 396. \ \ \frac{10}{15} = \frac{2}{3} \qquad 3$$

397.
$$\frac{6}{48} = \frac{1}{8}$$
 398. $\frac{9}{15} = \frac{3}{5}$ 399. $\frac{3}{9} = \frac{1}{3}$ 400. $\frac{28}{42} = \frac{2}{3}$

Classify each the angle	es.
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402.



403.

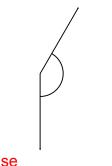


Reflex

Reflex

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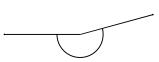
404.



405.



406.



Obtuse

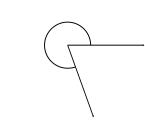
Straight

Reflex

407.



408.



409.



Acute

Reflex

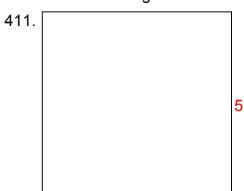
Acute

410.

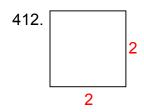


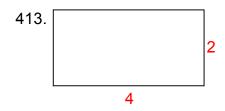
Acute

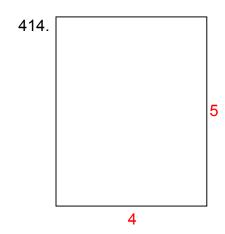
Measure the rectangles.

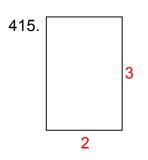


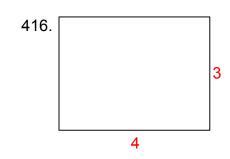
5

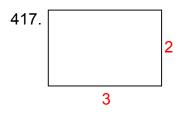


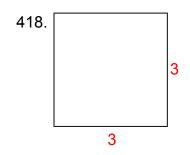


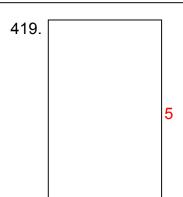


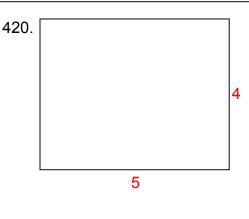








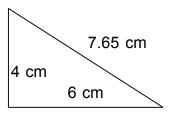




Find the perimeter and area.

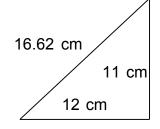
3

421.



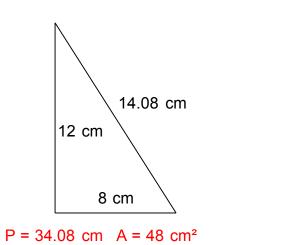
 $P = 17.65 \text{ cm} A = 12 \text{ cm}^2$

422.

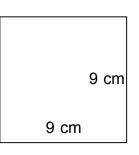


 $P = 39.62 \text{ cm} \text{ A} = 66 \text{ cm}^2$

423.

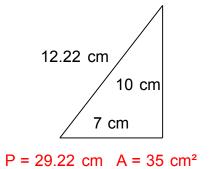


424.

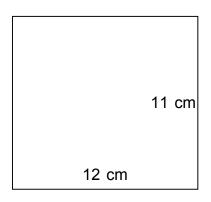


 $P = 36 \text{ cm} \quad A = 81 \text{ cm}^2$

425.

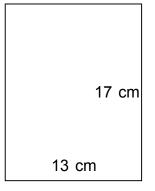


426.



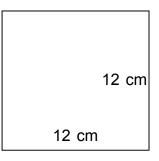
 $P = 46 \text{ cm} A = 132 \text{ cm}^2$





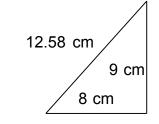
 $P = 60 \text{ cm} A = 221 \text{ cm}^2$

428.



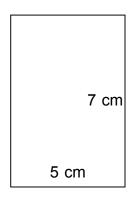
 $P = 48 \text{ cm} \quad A = 144 \text{ cm}^2$

429.



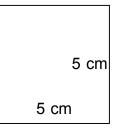
 $P = 29.58 \text{ cm} \text{ A} = 36 \text{ cm}^2$

430.



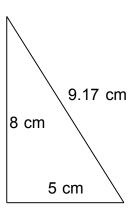
 $P = 24 \text{ cm} \quad A = 35 \text{ cm}^2$

431.



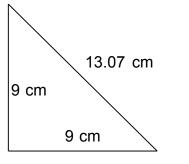
 $P = 20 \text{ cm} \text{ A} = 25 \text{ cm}^2$

432.



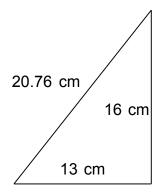
 $P = 22.17 \text{ cm} A = 20 \text{ cm}^2$

433.

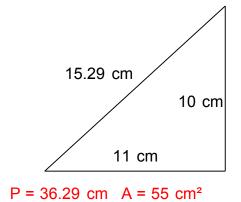


 $P = 31.07 \text{ cm} \quad A = 40.5 \text{ cm}^2$

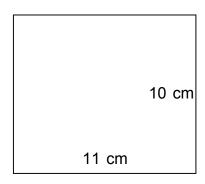
434.



P = 49.76 cm A = 104 cm²

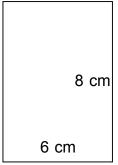


436.



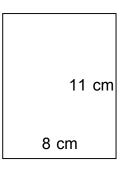
 $P = 42 \text{ cm} \quad A = 110 \text{ cm}^2$

437.



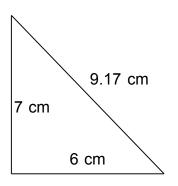
 $P = 28 \text{ cm} \quad A = 48 \text{ cm}^2$

438.



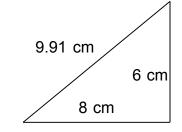
 $P = 38 \text{ cm} \quad A = 88 \text{ cm}^2$

439.



 $P = 22.17 \text{ cm} A = 21 \text{ cm}^2$

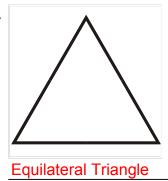
440.



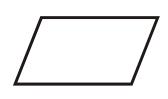
 $P = 23.91 \text{ cm} A = 24 \text{ cm}^2$

Identify the polygons.

441.

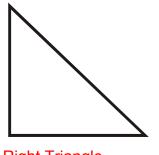


442.



Parallelogram

443.



Right Triangle

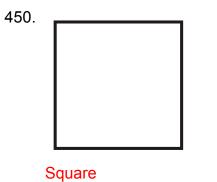
Regular Octagon

448.

448.

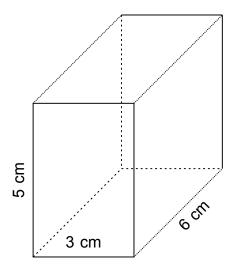
Rectangle

Regular Hexagon



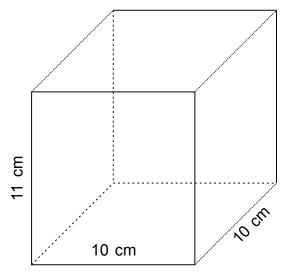
Find the volume and surface area of each shape.

451. E 6 cm



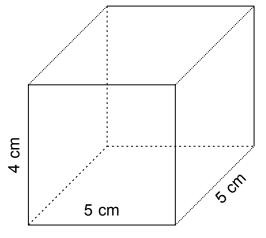
 $V = 90 \text{ cm}^3 \text{ SA} = 126 \text{ cm}^2$

453.

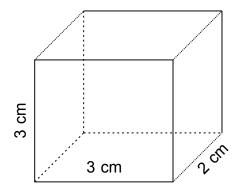


 $V = 1,100 \text{ cm}^3 \text{ SA} = 640 \text{ cm}^2$

454.

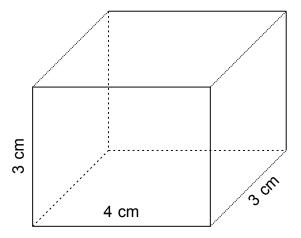


 $V = 100 \text{ cm}^3 \text{ SA} = 130 \text{ cm}^2$



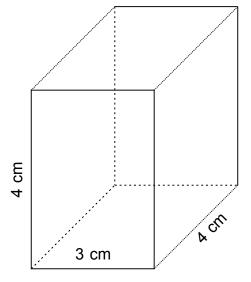
 $V = 18 \text{ cm}^3 \text{ SA} = 42 \text{ cm}^2$

456.

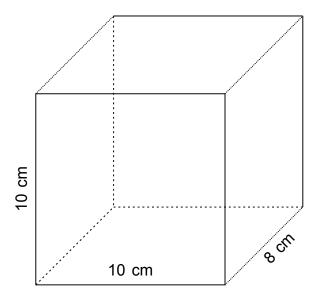


 $V = 36 \text{ cm}^3 \text{ SA} = 66 \text{ cm}^2$

457.

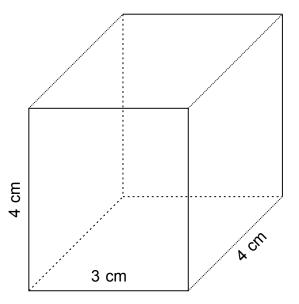


 $V = 48 \text{ cm}^3 \text{ SA} = 80 \text{ cm}^2$



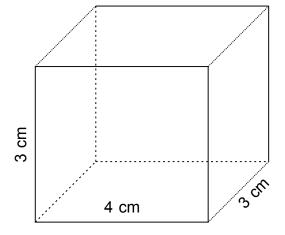
 $V = 800 \text{ cm}^3 \text{ SA} = 520 \text{ cm}^2$

459.



 $V = 48 \text{ cm}^3 \text{ SA} = 80 \text{ cm}^2$

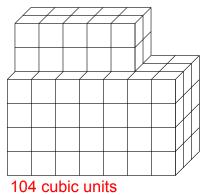
460.



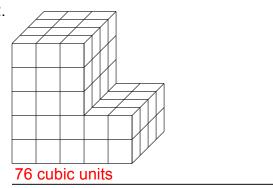
 $V = 36 \text{ cm}^3 \text{ SA} = 66 \text{ cm}^2$

Determine the number of cubes.

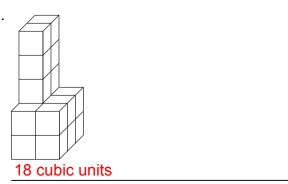
461.



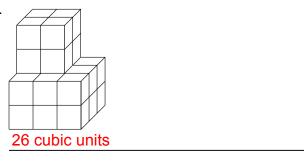
462.



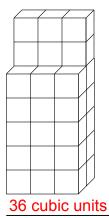
463.



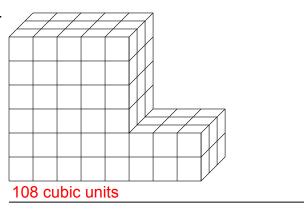
464.



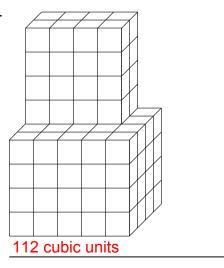
465.

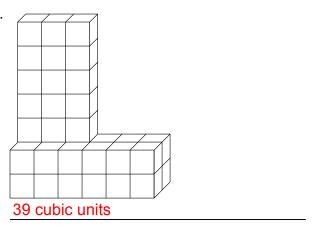


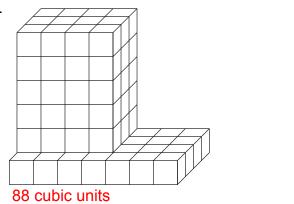
466.



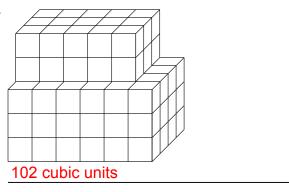
467.



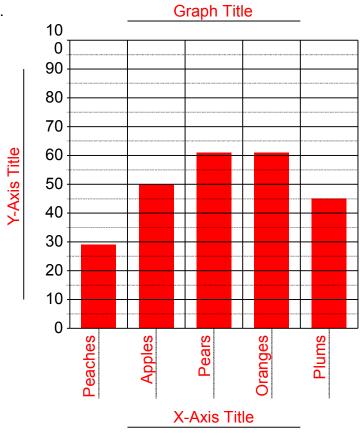




470.



Complete the graph.

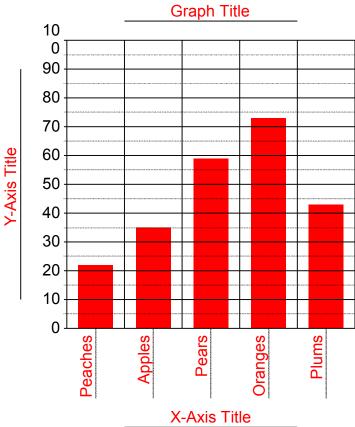


Graph Title

X-Axis Title	Y-Axis Title
Peaches	29
Apples	50
Pears	61
Oranges	61
Plums	45

Complete the graph.

472.

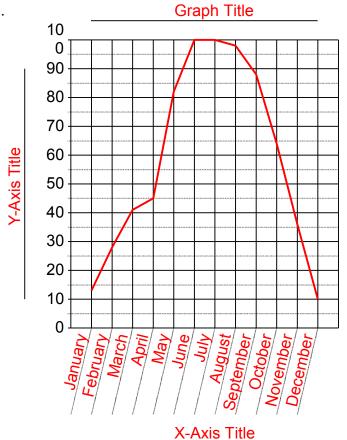


Graph Title

X-Axis Title	Y-Axis Title
Peaches	22
Apples	35
Pears	59
Oranges	73
Plums	43

Complete the graph.

473.

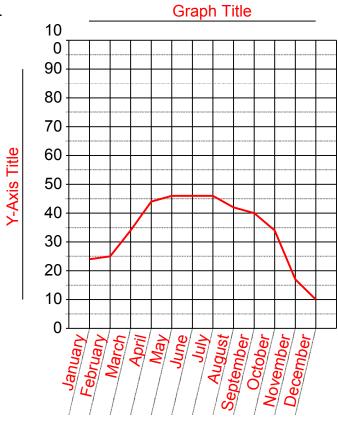


Graph Title

X-Axis Title	Y-Axis Title				
January	13				
February	28				
March	41				
April	45				
May	82				
June	100				
July	100				
August	98				
September	88				
October	64				
November	36				
December	10				

Complete the graph.





Graph Title

X-Axis Title	Y-Axis Title				
January	24				
February	25				
March	34				
April	44				
May	46				
June	46				
July	46				
August	42				
September	40				
October	34				
November	17				
December	10				

Convert the given measures to new units.

475.	13 km = <u>13,000,000</u>	mm	476.	40 km = 40,000	m
477.	30 mm = <u>0.00003</u>	km	478.	92 km = <u>92,000</u>	<u>m</u>
479.	18 cm = <u>0.00018</u>	km	480.	57 mm = <u>0.057</u>	<u>m</u>
481.	57 km = <u>57,000,000</u>	mm	482.	41 cm = <u>0.41</u>	<u>m</u>
483.	12 m = <u>0.012</u>	km	484.	42 cm = <u>0.00042</u>	km
485.	82 km = <u>8,200,000</u>	cm	486.	47 cm = 470	mm
487.	27 mm = <u>0.000027</u>	km	488.	82 m = <u>0.082</u>	km
489.	82 mm = <u>0.000082</u>	km	490.	27 m = 2,700	cm
491.	10 m = <u>0.01</u>	km	492.	78 mm = <u>0.000078</u>	km
493.	35 m = <u>0.035</u>	km	494.	57 m = <u>0.057</u>	km

Convert the given measures to new units.

495. 24 mg = <mark>0.024</mark>	g 496. 16 mg = 0.016	g
---------------------------------	----------------------	---

497.
$$78 g = 78,000$$
 mg 498. $52 g = 52,000$ mg

499. 83 mg =
$$0.083$$
 g 500. 96 mg = 0.096 g

501.
$$34 \text{ mg} = 0.034$$
 g 502. $69 \text{ g} = 69,000$ mg

503.
$$64 g = 64,000$$
 mg 504. $42 g = 42,000$ mg

Convert the given measures to new units.

505.
$$12 \text{ g} = 0.012$$
 kg 506. $45 \text{ kg} = 45,000$ g

507.
$$72 g = 0.072$$
 kg 508. $56 kg = 56,000$ g

509.
$$76 g = 0.076$$
 kg 510. $58 kg = 58,000$ g

511.
$$78 \text{ g} = 0.078$$
 kg 512. $95 \text{ g} = 0.095$ kg

513.
$$28 \text{ kg} = 28,000$$
 g 514. $60 \text{ kg} = 60,000$ g

Convert the given measures to new units.

515. 31 kg =
$$0.031$$
 t 516. 50 t = $50,000$ kg

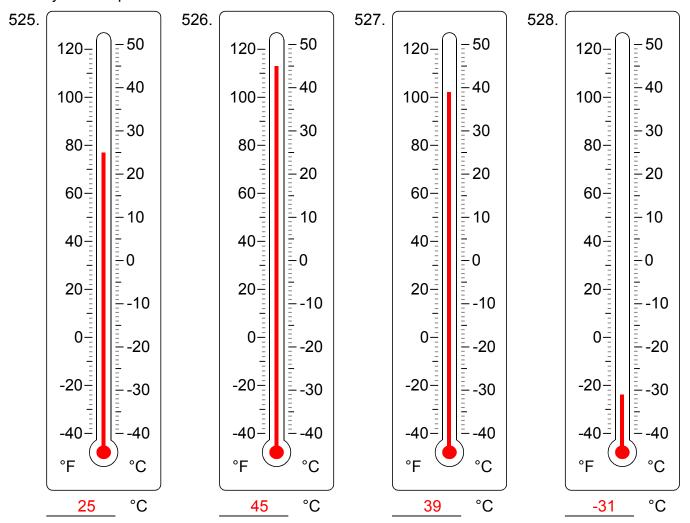
517.
$$48 \text{ t} = 48,000$$
 kg 518. $89 \text{ kg} = 0.089$ t

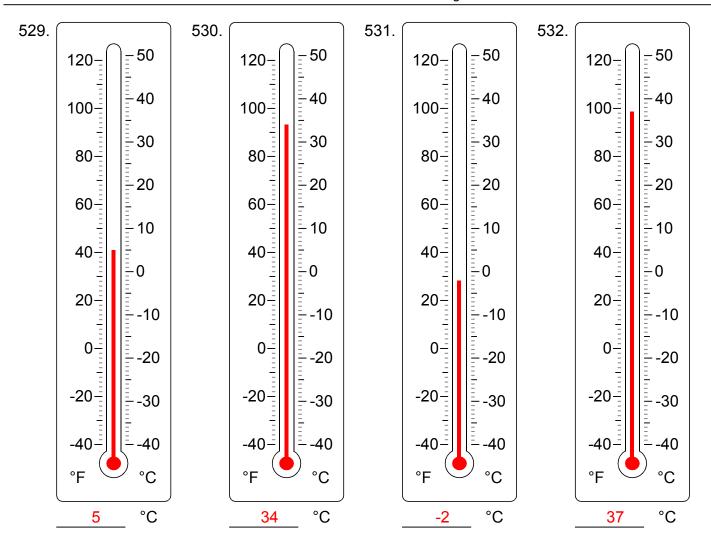
519.
$$61 \text{ kg} = 0.061$$
 t $520. 34 \text{ t} = 34,000$ kg

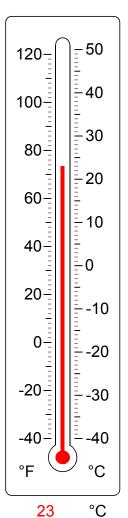
521.
$$81 \text{ kg} = 0.081$$
 t 522. $58 \text{ t} = 58,000$ kg

523.
$$31 t = 31,000$$
 kg 524. $27 kg = 0.027$ t

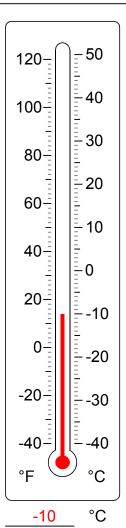
Identify the temperature for each thermometer.







534.



Calculate the powers below.

$$535. \ 21^3 = 9,261$$

536.
$$9^3 = 729$$
 537. $2^4 = 16$

$$537. \ 2^4 = 16$$

$$538. \ 22^3 = 10,648$$

539.
$$11^4 = 14,641$$
 540. $2^2 = 4$

$$540. \ 2^2 = 4$$

$$541. \ 2^3 = 8$$

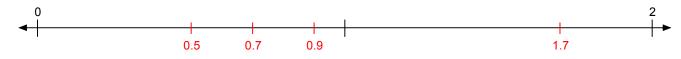
$$542. \ 10^4 = 10,000$$

$$543. \ 23^3 = 12,167$$

$$544. \ 21^4 = 194,481$$

Identify where each set of points should be placed on the number lines below.

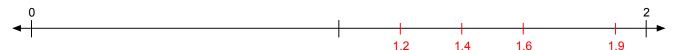
545. 0.7 0.9 1.7 0.5



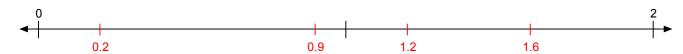
546. 0.9 0.5 1.1 1.6



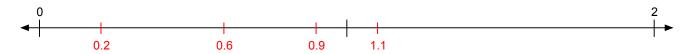
547. 1.9 1.4 1.2 1.6



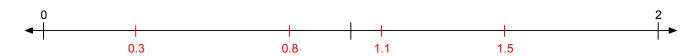
548. 0.2 1.6 0.9 1.2



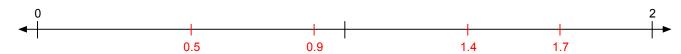
549. 0.6 0.9 1.1 0.2



550. 0.8 1.5 1.1 0.3



551. 1.4 0.9 1.7 0.5

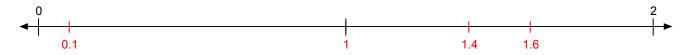


552. 1.8 0.6 0.8 0.1





554. 1.6 1.4 1 0.1



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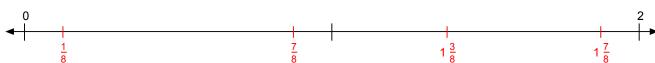
Identify where each set of points should be placed on the number lines below.

555.



$$1\frac{3}{8}$$
 $\frac{1}{8}$

$$1\frac{7}{8}$$



556.

$$\frac{9}{10}$$
 $1\frac{2}{5}$ $\frac{1}{5}$ $\frac{1}{2}$

$$\frac{1}{5}$$
 $\frac{1}{2}$









557.
$$\frac{1}{8}$$
 $\frac{7}{8}$ $1\frac{1}{4}$ $1\frac{7}{8}$

$$1\frac{1}{4}$$





558. $1\frac{9}{10}$ $1\frac{1}{10}$ $\frac{1}{10}$ $\frac{1}{2}$

$$1\frac{1}{10}$$

$$\frac{1}{2}$$









559.
$$1\frac{9}{10}$$
 $1\frac{2}{5}$ $\frac{9}{10}$ $\frac{2}{5}$

$$1\frac{2}{5}$$















$$\frac{7}{8}$$

$$\frac{1}{2}$$
 1 $\frac{3}{8}$







561.
$$\frac{2}{5}$$
 $1\frac{4}{5}$ $\frac{1}{10}$





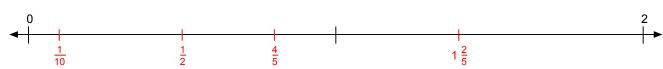


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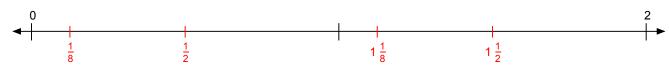
562. $1\frac{3}{8}$ $\frac{5}{8}$ 1 $\frac{1}{8}$



563. $\frac{4}{5}$ $\frac{1}{10}$ $1\frac{2}{5}$ $\frac{1}{2}$



564. $\frac{1}{2}$ $\frac{1}{8}$ $1\frac{1}{8}$ $1\frac{1}{2}$



Identify where each set of points should be placed on the number lines below.

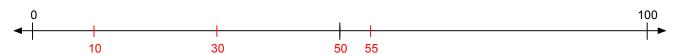
565. 30, 95, 50, 60



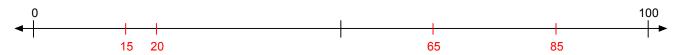
566. 55, 70, 20, 5



567. 50, 10, 55, 30



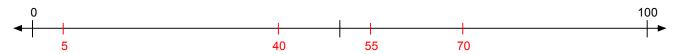
568. 20, 85, 65, 15



569. 65, 75, 50, 30



570. 5, 70, 55, 40



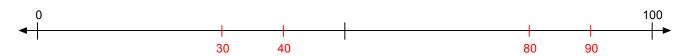
571. 30, 90, 95, 10



572. 50, 5, 10, 20



573. 30, 90, 80, 40



574. 75, 55, 20, 45



Complete the counting tables.

575. Count by 2 from 7 to 25

-										
	7	a	11	13	15	17	10	21	23	25
	'	9		13	13	17	19	21	23	23

576. Count by 3 from 9 to 36

	•								
9	12	15	18	21	24	27	30	33	36

577. Count by 9 from 2 to 83

	•								
2	11	20	29	38	47	56	65	74	83

578. Count by 4 from 8 to 44

8	12	16	20	24	28	32	36	40	44

579. Count by 4 from 4 to 40

4	8	12	16	20	24	28	32	36	40

580. Count by 6 from 5 to 59

1 1 1 1 1 1 1 1 1 1

581. Count by 4 from 6 to 42

_										
	6	10	14	18	22	26	30	34	38	42

582. Count by 9 from 1 to 82

	1	10	19	28	37	46	55	64	73	82
ı			1							

583. Count by 3 from 5 to 32

5 8 11 14 17 20 23 26 29 32	5	8	11	14	17	20	23	26	29	32
-----------------------------	---	---	----	----	----	----	----	----	----	----

584. Count by 4 from 3 to 39

3	7	11	15	19	23	27	31	35	39

Write each value in words.

585. 2,028 two thousand twenty-eight

586. 7,465 seven thousand four hundred sixty-five

587. 6,872 six thousand eight hundred seventy-two

588. 9,788 nine thousand seven hundred eighty-eight

589. 2,372 two thousand three hundred seventy-two

590. 4,382 four thousand three hundred eighty-two

591. 8,376 eight thousand three hundred seventy-six

592. 2,400 two thousand four hundred

593. 5,359 five thousand three hundred fifty-nine

594. 4,007 four thousand seven

Provide the standard notation for each value.

595. 4,759 four thousand seven hundred fifty-nine

596. 1,791 one thousand seven hundred ninety-one

597. 5,311 five thousand three hundred eleven

598. 200 two hundred

599. 5,341 five thousand three hundred forty-one

600. 2,893 two thousand eight hundred ninety-three

601. 203 two hundred three

602. 6,268 six thousand two hundred sixty-eight

603. 9,689 nine thousand six hundred eighty-nine

604. 2,429 two thousand four hundred twenty-nine

Order the numbers.

605. 827 <u>102</u>	606. 424 <u>424</u>	607. 167 <u>167</u>	608. 786 <u>436</u>	609. 156 <u>156</u>
975 <u>216</u>	955 <u>629</u>	963 <u>432</u>	752 <u>441</u>	441 <u>294</u>
102 <u>428</u>	888 <u>787</u>	771 <u>770</u>	999 <u>619</u>	294 <u>441</u>
514 <u>514</u>	629 <u>888</u>	770 <u>771</u>	441 <u>752</u>	715 <u>459</u>
428 <u>827</u>	787 <u>954</u>	817 <u>817</u>	619 <u>786</u>	987 <u>715</u>
216 <u>975</u>	954 <u>955</u>	432 <u>963</u>	436 <u>999</u>	459 <u>987</u>

610. 536 <u>126</u>	611. 702 <u>117</u>	612. 203 <u>196</u>	613. 735 <u>182</u>	614. 556 <u>209</u>
762 <u>240</u>	891 <u>224</u>	436 <u>203</u>	556 <u>204</u>	398 <u>398</u>
445 <u>393</u>	594 <u>594</u>	196 <u>436</u>	541 <u>541</u>	420 <u>420</u>
240 <u>445</u>	117 <u>617</u>	881 <u>551</u>	204 <u>556</u>	531 <u>531</u>
126 <u>536</u>	617 <u>702</u>	759 <u>759</u>	926 <u>735</u>	209 <u>556</u>
393 762	224 <mark>891</mark>	551 <mark>881</mark>	182 <mark>926</mark>	780 <mark>780</mark>

Convert.

615.
$$63\frac{1}{4}\% = 0.632$$
 616. $88\% = 0.88$ 617. $31\frac{2}{5}\% = 0.314$

618.
$$11\frac{5}{10}\% = 0.115$$
 619. $68\frac{3}{4}\% = 0.688$ 620. $18\frac{4}{5}\% = 0.188$

621.
$$97\frac{7}{10}\% = 0.977$$
 622. $79\frac{1}{2}\% = 0.795$ 623. $89\frac{1}{2}\% = 0.895$

624.
$$38\frac{3}{5}\% = 0.386$$

Convert each decimal to a percentage.

625.
$$0.248 = 24\frac{4}{5}\%$$
 626. $0.69 = 69\%$

$$626. \ 0.69 = 69\%$$

627.
$$0.335 = 33\frac{1}{2}\%$$

628.
$$0.825 = 82\frac{1}{2}\%$$

628.
$$0.825 = 82\frac{1}{2}\%$$
 629. $0.393 = 39\frac{3}{10}\%$ 630. $0.932 = 93\frac{1}{4}\%$

630.
$$0.932 = 93\frac{1}{4}\%$$

631.
$$0.33 = 33\%$$

632.
$$0.786 = \frac{78 \frac{6}{10}\%}{}$$

634.
$$0.212 = 21\frac{1}{5}\%$$

Convert each percentage to a decimal and vice versa.

635.
$$19\frac{1}{4}\% = 0.192$$

635.
$$19\frac{1}{4}\% = 0.192$$
 636. $64\frac{3}{10}\% = 0.643$ 637. $0.992 = 99\frac{1}{4}\%$

637.
$$0.992 = 99\frac{1}{4}\%$$

638.
$$15\% = 0.15$$

638.
$$15\% = 0.15$$
 639. $0.934 = 93\frac{4}{10}\%$ 640. $0.325 = 32\frac{1}{2}\%$

640.
$$0.325 = 32\frac{1}{2}\%$$

641.
$$32\frac{2}{5}\% = 0.324$$
 642. $7\frac{2}{4}\% = 0.075$

642.
$$7\frac{2}{4}\% = 0.075$$

643. 81
$$\frac{1}{10}$$
% = 0.811

644.
$$88\frac{4}{5}\% = 0.888$$

Calculate the given percent of each value.

645.
$$10\%$$
 of $308 = 30.8$

647. 10% of 42 =
$$4.2$$

648. 10% of 2 =
$$0.2$$

650. 10% of 769 =
$$\frac{76.9}{}$$

Calculate the given percent of each value.

656. 73% of
$$2 = 1.46$$

661. 14% of 2 =
$$0.28$$
 662. 57% of 3 = 1.71

663. 92% of 59 =
$$\underline{54.28}$$

664. 22% of 42 =
$$9.24$$

Provide the conversions for each ratio.

665.

	Ratio	Fractio n	Percent	Decima I
a.	1:3	1/4	25%	0.25
b.	3:5	3/8	37.5%	0.375
C.	7:7	7/14	50%	0.5
d.	5:8	5/13	38.5%	0.385
e.	8:10	8/18	44.4%	0.444
f.	8:9	8/17	47.1%	0.471
g.	6:10	6/16	37.5%	0.375
h.	1:6	1/7	14.3%	0.143
i.	1:10	1/11	9.1%	0.091
j.	2:3	2/5	40%	0.4

666.

	Ratio	Fractio	Percent	Decima I
a.	3:7	3/10	30%	0.3
b.	2:4	2/6	33.3%	0.333
C.	1:7	1/8	12.5%	0.125
d.	8:8	8/16	50%	0.5
e.	1:3	1/4	25%	0.25
f.	1:4	1/5	20%	0.2
g.	1:6	1/7	14.3%	0.143
h.	3:6	3/9	33.3%	0.333
i.	3:5	3/8	37.5%	0.375
j.	4:5	4/9	44.4%	0.444

Complete the table.

667.

+	6	9	1	3	2
8	14	17	9	11	10
5	11	14	6	8	7
6	12	15	7	9	8
4	10	13	5	7	6
3	9	12	4	6	5

668.

+	1	5	7	3	4
4	5	9	11	7	8
6	7	11	13	9	10
3	4	8	10	6	7
2	3	7	9	5	6
8	9	13	15	11	12

Complete the table.

669.

÷	80	59	92	85	54
7	11 r3	8 r3	13 r1	12 r1	7 r5
5	16	11 r4	18 r2	17	10 r4
6	13 r2	9 r5	15 r2	14 r1	9
4	20	14 r3	23	21 r1	13 r2
2	40	29 r1	46	42 r1	27

÷	59	35	28	45	77
8	7 r3	4 r3	3 r4	5 r5	9 r5
7	8 r3	5	4	6 r3	11
4	14 r3	8 r3	7	11 r1	19 r1
3	19 r2	11 r2	9 r1	15	25 r2
2	29 r1	17 r1	14	22 r1	38 r1

Complete the table.

671.

×	2	4	11	8	5	
3	6	12	33	24	15	
7	14	28	77	56	35	
2	4	8	22	16	10	
10	20	40	110	80	50	
4	8	16	44	32	20	

672.

×	6	2	3	11	4
4	24	8	12	44	16
9	54	18	27	99	36
2	12	4	6	22	8
12	72	24	36	132	48
5	30	10	15	55	20

Complete the table.

673.

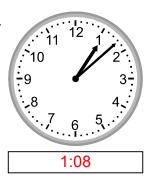
_	16	13	15	17	10
2	14	11	13	15	8
6	10	7	9	9 11	
9	7	4	6	8	1
7	9	6	8	10	3
8	8	5	7	9	2

674.

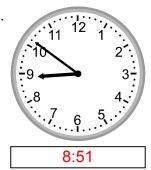
1	16	14	17	15	18
8	8	6	9	7	10
2	14	12	15	13	16
9	7	5	8	6	9
4	12	10	13	11	14
3	13	11	14	12	15

Show the time for each clock.

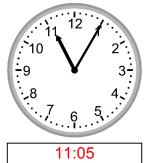
675.



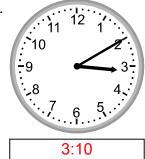
676.







679.



680.



681.



682.



683.



684.



Show the time for each clock.

685.



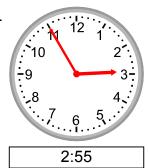
686.



687.



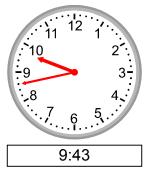
688.



689.



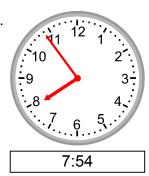




692.



693.

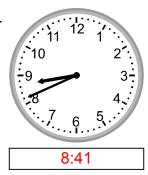


694.



Show the time for each clock.

695.





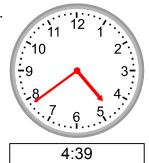
697.



698.



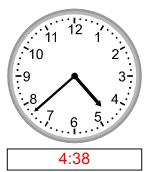
699.



700.



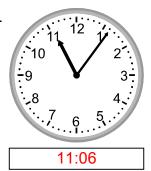
701.



702.







Show the time for each clock.

705.





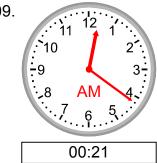
707.



708.



709.



710.



711.



712.



713.





Show the time for each clock.

715.



716.



717.



718.





720.



721.



722.



723.



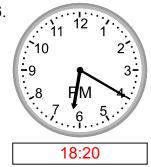


Show the time for each clock.

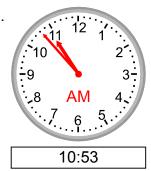
725.



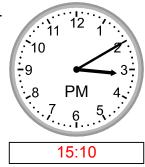
726.



727.



728.



729.



730.



731.



732.



733.



734.



Convert the given measures of time to alternate measures of time.

735. 93 min =
$$5,580$$
 sec

736. 84 hr =
$$5,040 \text{ min}$$

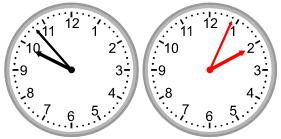
$$737. 36 \text{ hr} = 2$$

738. 83 min =
$$4,980$$
 sec

744. 29 hr = 1,740 min

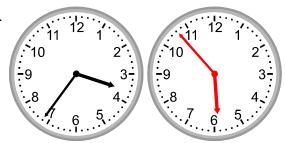
Draw the clock hands to show the passage of time.

745.



What time will it be in 4 hours 11 minutes?

746.



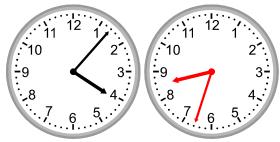
What time will it be in 2 hours 17 minutes?

747.



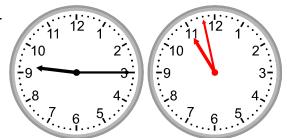
What time will it be in 3 hours 19 minutes?

748.



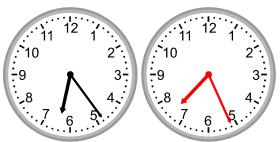
What time will it be in 4 hours 26 minutes?

749.



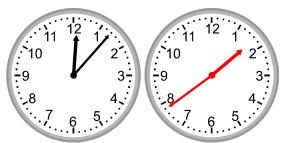
What time will it be in 1 hour 42 minutes?

750.

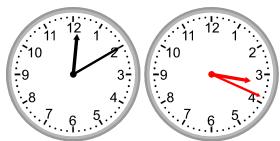


What time will it be in 1 hour 1 minute?

751.

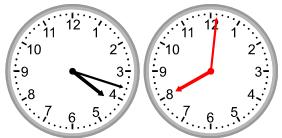


What time will it be in 1 hour 31 minutes?



What time will it be in 3 hours 9 minutes?





What time will it be in 3 hours 43 minutes?



What time will it be in 5 hours 51 minutes?

Draw the clock hands to show the passage of time.

755.



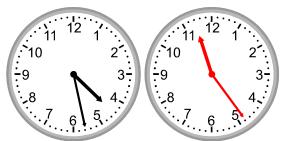
What time was it 5 hours 10 minutes ago?

756.



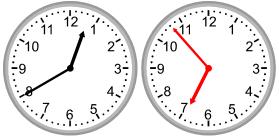
What time was it 2 hours 26 minutes ago?

757.



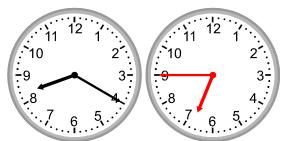
What time was it 5 hours 3 minutes ago?

758.

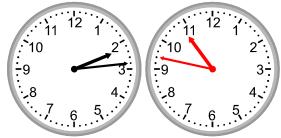


What time was it 5 hours 46 minutes ago?

759.

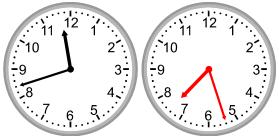


What time was it 1 hour 35 minutes ago?

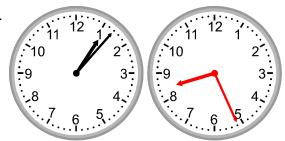


What time was it 3 hours 26 minutes ago?



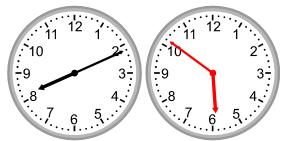


What time was it 4 hours 15 minutes ago?



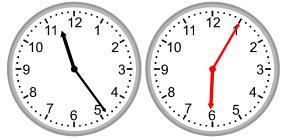
What time was it 4 hours 40 minutes ago?

763.



What time was it 2 hours 19 minutes ago?

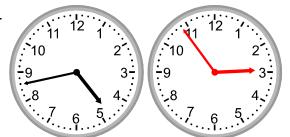
764.



What time was it 5 hours 19 minutes ago?

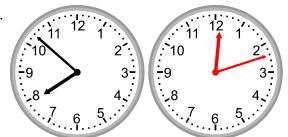
Draw the clock hands to show the passage of time.

765.



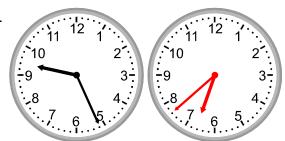
What time was it 1 hour 49 minutes ago?

766.

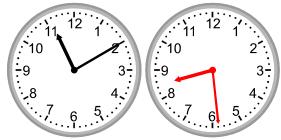


What time will it be in 4 hours 19 minutes?

767.

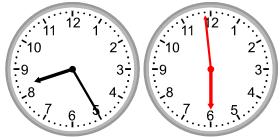


What time was it 2 hours 48 minutes ago?

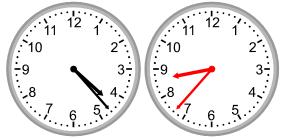


What time was it 2 hours 40 minutes ago?



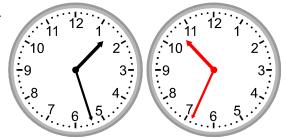


What time was it 2 hours 26 minutes ago?



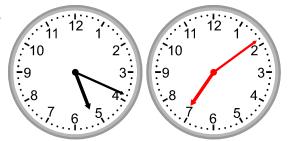
What time will it be in 4 hours 13 minutes?

773.



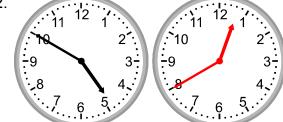
What time was it 2 hours 53 minutes ago?

770.

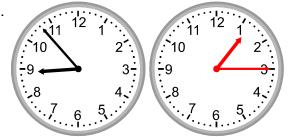


What time will it be in 1 hour 50 minutes?

772.



What time was it 4 hours 10 minutes ago?



What time will it be in 4 hours 21 minutes?

775.	In the space below sketch a map from school to your home. It does
no	need to be to scale

Obviously there is no single correct answer to this task.

Discuss this map with your teacher and ask for constructive criticism.

776. In the space below sketch a plan of the school. It does not need to be to scale.

Obviously there is no single correct answer to this task.

Discuss this plan with your teacher and ask for constructive criticism.

Chance

777. What is the probability (chance) of tossing a coin and it showing heads?

 $\frac{1}{2}$ or 50% or 0.5

778. What is the probability (chance) of rolling a die and it showing a 5?

1/6 or 17% or 0.17

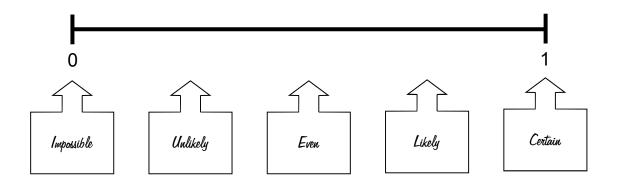
779. A hat contains 5 red and 4 green discs. What is the probability (chance) of drawing a green disc?

4/9 or 44% or 0.44

780. A standard deck of cards contains 52 cards. What is the probability of randomly drawing an Ace Of Spades from the deck?

1/52 or 1.9% or 0.019

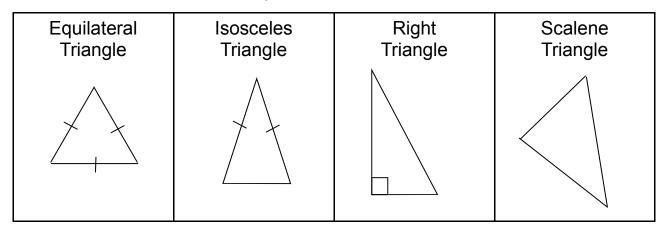
781. On the number line below, show the location of probabilities which can be described as; certain, unlikely, likely, impossible and even.



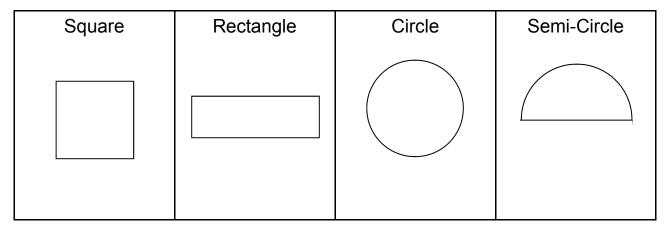
782. The walls of a room are to be painted with two coats of paint. The area of the walls is $25m^2$. Correct application of the paint requires 100mL of paint per square metre. Calculate how many litres of paint will be required.
<u>5 litres</u>
783. A front lawn has an area of 225m ² . A pesticide to remove weeds is sprayed onto the lawn at a rate of 50mL per square metre. How much pesticide is required to complete the task?
<u>1.25 litres</u>

784. It's spring time and the lawn is to be fertilised with a powdered food for grass. The fertiliser is to be spread at a rate of 50g per square metre. The bags of fertiliser are 10kg. How many square metres of lawn will be fertilised with 2 bags of lawn food?
400 square wetres

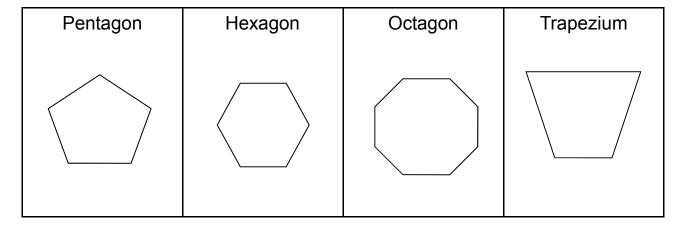
785. Draw the named shapes in the boxes below.



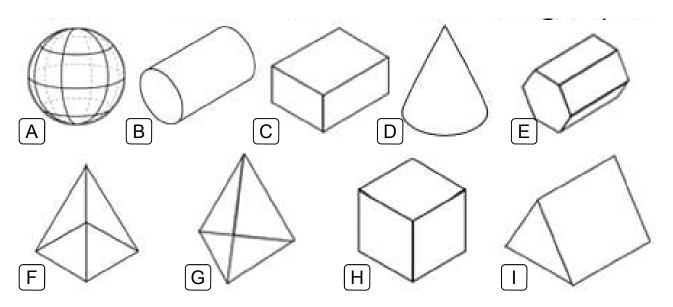
786. Draw the named shapes in the boxes below.



787. Draw the named shapes in the boxes below.



788. Name the solids shown below.



- A) sphere
- C) rectangular prism
- E) hexagonal prism
- G) triangular pyramid
- I) triangular prism

- B) <u>cylinder</u>
- D) cone
- F) square pyramid
- H) <u>cube</u>

789. Below is a table with the ingredients for a recipe which is able to feed 4 people. The other columns are blank. Fill in the table to allow the recipe to feed the number given.

Ingredients	4 people	2 people	3 people	5 people	6 people
Spiral Pasta	500g	250g	375g	625g	750g
Minced Meat (beef or chicken)	400g	200g	300g	500g	600g
Pasta Sauce	350mL	175mL	263mL	438mL	525mL
Parmesan Cheese	150g	75g	113g	188g	225g
Olive Oil	2 tbsp*	Itosp	1.5tbsp	2.5tbsp	3tbspn

^{*} tbsp = table spoon.

790. Below is a sign showing the costs of parking in the Toowong Village & Tower parking station. Read the sign carefully and answer the

questions shown to the right of the sign.

PARKING RATES
TIME RATE
0 - 2.0 hrs FREE
2.0 - 2.5 hrs \$ 2.00

b) How much does a staff member pay for 7 hours of parking?

\$\frac{\xi}{4.00}\$

c) A person parks from 8pm until 7am and pays by credit card. What is the total cost?

TOOWONG TIME 0 - 2.0 hrs 2.0 - 2.5 hrs 2.5 - 3.0 hrs \$ 3.00 3.0 - 3.5 hrs \$ 4.00 3.5 - 4.0 hrs \$ 6.00 4.0 - 4.5 hrs \$ 10.00 4.5 - 5.0 hrs \$ 15.00 5.0 - 5.5 hrs \$20.00 5.5 - 6.0 hrs \$ 25.00 6.0 - 6.5 hrs \$ 35.00 6.5 - 7.0 hrs \$40.00 \$49.00 7+ hrs Midnight - 7am \$20.00 \$ 4.00 Staff (parked in allocated per day staff parking area) 2 HOURS FREE PARKING FREE PARKING WITH ENTRY AFTER 6PM 2% transaction fee for each credit card transaction. Rates applicable Monday until Sunday and all Public Holidays.

791. Below is a map of Southern Florida. Use the map to answer the questions.



a) What is the name of the northernmost city?

Sanford

b) What is the name of the westernmost city?

Clearwater

c) Use the scale on the map to estimate the distance between Key West and Naples in miles and kilometres.

173km (+/- 5km), 108miles (+/- 3miles)

792. Below is a detailed map of Miami Beach. Use the map to answer the questions.



a) In what direction does 11th street run?

East-West

- b) What is the direction of the police station from the Lifeguard tower?

 West North West or WNW
- c) Which is closer to the toilets, the police station or The Edge theater?

 The Edge Theater
- d) Using the scale, how far is the Kenmore Hotel from the Cardozo Hotel? $430_{\rm m} + /_{\rm -} 5_{\rm m}$