## NI A 

Mount Annau High School


HSC Minimum Standards

## Table Of Contents

Standerd refers to the National Standards Document 3.0912 is Outcome 3.09, Focus Area 1, dot point 2.

| Question | Page | Description | Standard | Done | Mark |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1-10 | 1 | 2 digit addition | 3.0921 | $\square$ | /10 |
| 11-20 | 1 | 3 digit addition | 3.0921 | $\square$ | /10 |
| 21-30 | 1 | Division by single digit | 3.0921 | $\square$ | /10 |
| 31-40 | 1 | Multiplication by single digit | 3.0921 | $\square$ | /10 |
| 41-50 | 1-2 | Multiplication by double digit | 3.0921 | $\square$ | /10 |
| 51-60 | 2 | 2 digit subtraction (trading) | 3.0921 | $\square$ | /10 |
| 61-70 | 2 | 3 digit subtraction (trading) | 3.0921 | $\square$ | /10 |
| 71-80 | 2 | 2 digit addition multiple addends | 3.0921 | $\square$ | /10 |
| 81-90 | 2-3 | Problem solving (addition) | 3.0911 | $\square$ | /10 |
| 91-100 | 3-4 | Problem solving (division) | 3.0911 | $\square$ | /10 |
| 101-110 | 4-5 | Problem solving (multiplication) | 3.0911 | $\square$ | /10 |
| 111-120 | 5-6 | Problem solving (subtraction) | 3.0911 | $\square$ | /10 |
| 121-220 | 6-8 | Order of operations (BODMAS) | 3.1032 | $\square$ | /100 |
| 221-240 | 9-10 | Wages/Rates problems | 3.1031,2,3 | $\square$ | /20 |
| 241-250 | 10-11 | Currency to words | 3.1111 | $\square$ | /10 |
| 251-260 | 11 | Ordering from a menu | 3.1031 | $\square$ | /10 |
| 261-270 | 12 | Comparing fractions (com den) | 3.0921 | $\square$ | /10 |
| 271-280 | 12 | Comparing fractions (diff den) | 3.0921 | $\square$ | /10 |
| 281-290 | 12 | Dividing integers by fractions | 3.0921 | $\square$ | /10 |
| 291-300 | 12 | Equivalent fractions | 3.0921 | $\square$ | /10 |
| 301-310 | 12-13 | Simplifying fractions (100s) | 3.0921 | $\square$ | /10 |
| 311-320 | 13 | Simplifying fractions | 3.0921 | $\square$ | /10 |
| 321-330 | 13 | Adding fractions (com den) | 3.0921 | $\square$ | /10 |
| 331-340 | 13 | Fraction to decimal | 3.0921 | $\square$ | /10 |
| 341-350 | 14 | Multiplying fractions (com den) | 3.0921 | $\square$ | /10 |
| 351-360 | 14 | Subtracting fractions (com den) | 3.0921 | $\square$ | /10 |
| 361-370 | 14 | Mixed numerals to improper frac | 3.0921 | $\square$ | /10 |
| 371-380 | 14 | Adding mixed numerals | 3.0921 | $\square$ | /10 |
| 381-390 | 14 | Fractions of whole numbers | 3.0921 | $\square$ | /10 |
| 391-400 | 14 | Simplifying fractions | 3.0921 | $\square$ | /10 |

Table Of Contents (contimued)
Standard refers to the National Stamderards Document 3.0912 is Outcome 3.09, Focus Area 1, dot point 2.

| Question | Page | Description | Standard | Done | Mark |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $401-410$ | 15 | Classifying angles | 3.1043 | $\square$ | $/ 10$ |
| $411-420$ | $16-17$ | Measuring rectangles | 3.1042 | $\square$ | $/ 10$ |
| $421-440$ | $17-19$ | Area and perimeter of shapes | 3.1042 | $\square$ | $/ 40$ |
| $441-450$ | $19-20$ | Naming 2D shapes | 3.0922 | $\square$ | $/ 10$ |
| $451-460$ | $20-23$ | Volume of solids | 3.1042 | $\square$ | $/ 10$ |
| $461-470$ | $24-25$ | Counting cubes | 3.1042 | $\square$ | $/ 10$ |
| $471-474$ | $25-27$ | Graphing data | 3.1051 | $\square$ | $/ 4$ |
| $475-494$ | 27 | Converting length units | 3.1044 | $\square$ | $/ 10$ |
| $495-504$ | 28 | Converting mass units (g, mg) | 3.1044 | $\square$ | $/ 10$ |
| $505-514$ | 28 | Converting mass units (g, kg) | 3.1044 | $\square$ | $/ 10$ |
| $515-524$ | 28 | Converting mass units (kg, t) | 3.1044 | $\square$ | $/ 10$ |
| $525-534$ | $29-31$ | Reading a thermometer ${ }^{\circ} \mathrm{C}$ | 3.1042 | $\square$ | $/ 10$ |
| $535-544$ | 31 | Indices | 3.1021 | $\square$ | $/ 10$ |
| $545-554$ | $31-32$ | Size of decimals (num line) | 3.0921 | $\square$ | $/ 10$ |
| $555-564$ | $33-34$ | Size of fractions (num line) | 3.0921 | $\square$ | $/ 10$ |
| $565-574$ | $34-35$ | Size of integers (num line) | 3.0921 | $\square$ | $/ 10$ |
| $575-584$ | $35-36$ | Counting by integers | 3.0921 | $\square$ | $/ 10$ |
| $585-594$ | 36 | Number to words | 3.1121 | $\square$ | $/ 10$ |
| $595-604$ | $36-37$ | Words to numbers | 3.1121 | $\square$ | $/ 10$ |
| $605-614$ | 37 | Ordering numbers | 3.0921 | $\square$ | $/ 10$ |
| $615-624$ | 37 | Percentages to decimals | 3.1021 | $\square$ | $/ 10$ |
| $625-634$ | 38 | Decimals to percentages | 3.1021 | $\square$ | $/ 10$ |
| $635-644$ | 38 | Decimals \& Percentages | 3.1021 | $\square$ | $/ 10$ |
| $645-654$ | 38 | $10 \%$ of integer | 3.1031 | $\square$ | $/ 10$ |
| $655-664$ | 38 | Percentage of integer | 3.1021 | $\square$ | $/ 10$ |
| $665-666$ | 39 | Ratio:Fraction:Percent:Decimal | 3.1021 | $\square$ | $/ 60$ |
| $667-668$ | 39 | Quick addition table | 3.1021 | $\square$ | $/ 50$ |
| $669-670$ | 39 | Quick division table | 3.1021 | $\square$ | $/ 50$ |
| $671-672$ | 40 | Quick multiplication table | 3.1021 | $\square$ | $/ 50$ |
| $673-674$ | 40 | Quick subtraction table | 3.1021 | $\square$ | $/ 50$ |

## Table Of Contents (contimued again)

Standerde nefers to the National Standerards Document 3.0912 is Outcome 3.09, Focus Area 1, dot point 2.

| Question | Page | Description | Standard | Done | Mark |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $675-684$ | $40-41$ | Telling time (reading a clock) | 3.0921 | $\square$ | $/ 10$ |
| $685-694$ | $41-42$ | Telling time (hands on a clock) | 3.0921 | $\square$ | $/ 10$ |
| $695-704$ | $42-43$ | Using a clock (mixed) | 3.0921 | $\square$ | $/ 10$ |
| $705-714$ | 43 | 24 hour times (hands on a clock) | 3.0921 | $\square$ | $/ 10$ |
| $715-724$ | 44 | Reading 24 hours times | 3.0921 | $\square$ | $/ 10$ |
| $725-734$ | 45 | Using 24 hour time clock (mix) | 3.0921 | $\square$ | $/ 10$ |
| $735-744$ | $45-46$ | Converting time units (h, m, s) | 3.1042 | $\square$ | $/ 10$ |
| $745-754$ | $46-47$ | Passage of time on clock | 3.0921 | $\square$ | $/ 10$ |
| $755-764$ | $47-48$ | Time before a time on clock | 3.0921 | $\square$ | $/ 10$ |
| $765-774$ | $48-49$ | Mixed time questions | 3.0921 | $\square$ | $/ 10$ |
| 775 | 50 | Sketching a simple map | 3.0921 | $\square$ | $/ 10$ |
| 776 | 50 | Sketching a simple plan | 3.0921 | $\square$ | $/ 10$ |
| $777-781$ | 51 | Probability | 3.1052 | $\square$ | $/ 5$ |
| $782-784$ | 52 | Rates problems | 3.1033 | $\square$ | $/ 3$ |
| 785 | 53 | Drawing 2D shapes | 3.1041 | $\square$ | $/ 4$ |
| 786 | 53 | Drawing 2D shapes | 3.1041 | $\square$ | $/ 4$ |
| 787 | 53 | Drawing 2D shapes | 3.1041 | $\square$ | $/ 4$ |
| 788 | 54 | Naming 3D shapes | 3.1041 | $\square$ | $/ 9$ |
| 789 | 55 | Adjusting recipe ingredients | 3.1022 | $\square$ | $/ 20$ |
| 790 | 55 | Parking fees problems | 3.1022 | $\square$ | $/ 3$ |
| 791 | 56 | Using a map | 3.1045 | $\square$ | $/ 4$ |
| 792 | 57 | Using a key on a map | 3.1045 | $\square$ | $/ 4$ |

As one would expect, some of the questions cover multiple points on the national standards. The most reelevant 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. Turwing to the calculator can sometimes be useful to confirm answers especially if decinals 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.
1.

| 292. |
| ---: |
| +45 |

3. 96
4. 35
5. $\qquad$ 6. 58
6. 

| 49 |
| :--- |
| 79 |

8. 52
$\qquad$ $+89$
9. 60 10. 57
$+11+13$

Find the sum.
11. 67012

+ 208

2. 401
3. 551
4. 845
5. 703
6. 650
7. 802

$\qquad$ | +263 |
| :--- |


| $+\quad 238$ |
| :--- | $\qquad$

$\qquad$
$\qquad$ $+182$
18.


Find the quotient.
21.
$2 \longdiv { 2 }$
22.23
23.
$4 \longdiv { 2 4 }$
$4 \longdiv { 1 2 }$
24.
$8 \longdiv { 3 2 }$
25.
$1 \longdiv { 8 }$
26.
$5 \longdiv { 1 0 } \quad 2 7 .$
28.
$3 \longdiv { 1 2 }$
29. 30.
$3 \longdiv { 2 1 }$
$8 \longdiv { 8 }$

Find the product.
31.
1532.

1333
$\begin{array}{r}\times \quad 5 \\ \times \quad \\ \hline\end{array}$
13 34. 9
35. 5 36. $17 \quad 37$.
7.
38. 11
$\qquad$
$\qquad$
$\qquad$
$\begin{array}{r}\times \quad 3 \\ \hline\end{array}$
$\begin{array}{r}\times 8 \\ \hline\end{array}$
$\begin{array}{r}\times 6 \\ + \\ \hline\end{array}$

39.


Find the product.
41.

43.

44. 21
45. 21
46.
24 47. $\qquad$ 48. 54
$\qquad$
$\qquad$
$\qquad$ $\begin{array}{r} \\ \times \quad 73 \\ \hline\end{array}$
49. $60 \quad 50.61$
$\times 29$
$\times 14$

Find the difference.
51.

60. 95

- 44

Find the difference.

69. 83070.240
$\underline{-269} \quad-\quad-$

Find the sum.

| 71. 59 | 72. 31 | 73. | 61 | 74. 90 | 75. 37 | 76. 48 | 77.37 | 78. | 18 | 79. | 21 | 80. | 93 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 28 | 56 | 38 | 81 | 95 | 78 | 94 | 46 | 93 | 77 |  |  |  |  |
| 17 | 52 | 80 | 92 | 85 | 65 | 58 | 77 | 58 | 52 |  |  |  |  |
| 26 | 81 | 29 | 51 | 94 | 68 | 43 | 29 | 44 | 50 |  |  |  |  |
| $\underline{29}$ | $\underline{34}$ | $\underline{94}$ | $\underline{12}$ | $\underline{64}$ | $\underline{97}$ | $\underline{99}$ | $\underline{99}$ | $\underline{-}$ | $\underline{-}$ | $\underline{-}$ |  |  |  |
| - | - | - | - | - | - | - | - | - | - |  |  |  |  |

Solve.
81. Two apples are in the basket. Four more apples are put in the basket. How many apples are in the basket now?
$\qquad$
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?
$\qquad$
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?
$\qquad$
87. Eight balls were in the basket. Five are red and the rest are green. How many balls are green?
$\qquad$
88. Paul has eight pears and Allan has two pears. How many pears do Paul and Allan have together?
$\qquad$
89. 11 apples were in the basket. Three are red and the rest are green. How many apples are green?
$\qquad$
90. Six red oranges and five green oranges are in the basket. How many oranges are in the basket?

Solve.
91. You have 54 balls and want to share them equally with six people. How many balls would each person get?
$\qquad$
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?
$\qquad$
93. How many three cm pieces of rope can you cut from a rope that is 18 cm long?
$\qquad$
94. A box of oranges weighs 35 pounds. If one orange weighs five pounds, how many oranges are there in the box?
$\qquad$
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?
$\qquad$
96. Audrey ordered seven pizzas. The bill for the pizzas came to $\$ 21$. What was the cost of each pizza?
$\qquad$
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?
$\qquad$
98. A box of oranges weighs 12 pounds. If one orange weighs six pounds, how many oranges are there in the box?
$\qquad$
99. Paul ordered nine pizzas. The bill for the pizzas came to $\$ 36$. What was the cost of each pizza?
$\qquad$
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?
$\qquad$

Solve.
101. Janet's garden has six rows of pumpkins. Each row has three pumpkins. How many pumpkins does Janet have in all?
$\qquad$
102. Allan can cycle two miles per hour. How far can Allan cycle in three hours?
$\qquad$
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?
$\qquad$
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?
$\qquad$
107. Steven can cycle nine miles per hour. How far can Steven cycle in three hours?
$\qquad$
108. Michele has three times more apples than Donald. Donald has seven apples. How many apples does Michele have?
$\qquad$
109. If there are five peaches in each box and there are seven boxes, how many peaches are there in total?
$\qquad$
110. Jackie swims six laps every day. How many laps will Jackie swim in two days?
$\qquad$

Solve.
111. Marcie has zero fewer oranges than Janet. Janet has eight oranges. How many oranges does Marcie have?
$\qquad$
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?
$\qquad$
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?
$\qquad$
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?
$\qquad$
117. Six marbles are in the basket. Two marbles are taken out of the basket. How many marbles are in the basket now?
$\qquad$
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?
$\qquad$
119. Two apples are in the basket. Two are red and the rest are green. How many apples are green?
$\qquad$
120. Sharon has one fewer ball than Marcie. Marcie has six balls. How many balls does Sharon have?

Find the solution.
121. $6 \times 3+1=$ $\qquad$ 122. $5(5+8)=$ $\qquad$
123. $(9+9)^{2}=$ $\qquad$ 124. $4+4+3+1=$ $\qquad$
125. $(8+3) \times(1+4)=$ $\qquad$ 126. $7+7-1+6=$ $\qquad$
127. $6+1^{2}+8+1^{2}=$ $\qquad$ 128. $(5+8)^{2}+(2+7)^{2}=$ $\qquad$
129. $5+5+8+6=$ $\qquad$ 130. $(6+6)^{2}+(2+2)^{2}=$ $\qquad$
131. $7 \times(8+2)=$ $\qquad$ 132. $(3+5) \times(5+2)=$ $\qquad$
133. $(7+6)^{2}+(1+6)^{2}=$ $\qquad$ 134. $(4+3)(5+6)=$ $\qquad$
135. $(7+2) \times(3+2)=$ $\qquad$ 136. $(5+5)(9+1)=$ $\qquad$ 137. $7+6^{2}=$ $\qquad$ 138. $3 \times 5+8=$ $\qquad$
139. $(5+7)^{2}+(4+2)^{2}=$ $\qquad$ 140. $(1+9) \div 7=$ $\qquad$
141. $9 \times 6+7=$ $\qquad$ 142. $1 \times 1+8=$ $\qquad$
143. $(2+4) \div 4=$ $\qquad$ 144. $(2+8) \div 4=$ $\qquad$
145. $9(9+2)=$ $\qquad$ 146. $(4+4)^{2}+(5+7)^{2}=$ $\qquad$
147. $\left(7^{2}\right) \times\left(8^{2}\right)+7=$ $\qquad$ 148. $5+6^{2}=$ $\qquad$
149. $(3+1) \times(4+2)=$ $\qquad$ 150. $\left(9^{2}\right) \times\left(6^{2}\right)+4=$ $\qquad$
151. $3+4^{2}+8+6^{2}=$ $\qquad$ 152. $2+4+3+1=$ $\qquad$
153. $6 \times 3 \times 5=$ $\qquad$ 154. $6 \times 5 \times 8=$ $\qquad$
155. $(8+5)(9+4)=$ $\qquad$ 156. $(3+1)^{2}+(7+4)^{2}=$ $\qquad$
157. $3+9^{2}+3+2^{2}=$ $\qquad$ 158. $(1+7)^{2}+(1+5)^{2}=$ $\qquad$
159. $9+5+8+8=$ $\qquad$ 160. $5 \times(1+1)=$ $\qquad$
161. $3+9^{2}=$ $\qquad$ 162. $\left(9^{2}\right) \times\left(2^{2}\right)+4=$ $\qquad$
163. $(1+4) \div 3=$ $\qquad$ 164. $(1+1)(8+5)=$ $\qquad$
165. $5(4+8)=$ $\qquad$ 166. $7 \times 5+6=$ $\qquad$
167. $9 \times(2+9)=$ $\qquad$ 168. $4+1+4+5=$ $\qquad$
169. $1 \times 2+4=$ $\qquad$ 170. $(1+8)^{2}+(7+3)^{2}=$ $\qquad$
171. $(7+5)^{2}+(6+4)^{2}=$ $\qquad$ 172. $3 \times 9+4=$ $\qquad$
173. $4+8^{2}=$ $\qquad$ 174. $6 \times(2+1)=$ $\qquad$
175. $(3+3)^{2}+(5+1)^{2}=$ $\qquad$ 176. $2+8+3+2=$ $\qquad$

| 177. $(5+9)^{2}=$ | 178. $1 \times(9+9)=$ |
| :---: | :---: |
| 179. $6+7+3+8=$ | 180. $(1+2)^{2}=$ |
| 181. $3 \times(3+5)=$ | 182. $7+1-8+4=$ |
| 183. $(4+6) \div 3=$ | 184. $6 \times(3+3)=$ |
| 185. $2+9-2+3=$ | 186. $6 \times 1+3=$ |
| 187. $(3+5)^{2}=$ | 188. $5(7+8)=$ |
| 189. $4(7+4)=$ | 190. $(6+3)^{2}=$ |
| 191. $1 \times(5+8)=$ | 192. $\left(5^{2}\right) \times\left(9^{2}\right)+8=$ |
| 193. $7 \times 5+4=$ | 194. $3+7^{2}=$ |
| 195. $(4+7)(9+9)=$ | 196. $(6+8) \times(7+1)=$ |
| 197. $5 \times 4 \times 7=$ | 198. $8+8^{2}=$ |
| 199. $(9+7) \div 8=$ | 200. $8 \times 9 \times 7=$ |
| 201. $1+9^{2}=$ | 202. $\left(7^{2}\right) \times\left(4^{2}\right)+2=$ |
| 203. $(1+5) \div 8=$ | 204. $2+2^{2}+4+7^{2}=$ |
| 205. $2 \times 7+5=$ | 206. $5+8^{2}=$ |
| 207. $(3+6)^{2}=$ | 208. $9+4^{2}=$ |
| 209. $2+8-3+6=$ | 210. $(1+6)(3+9)=$ |
| 211. $9+5-6+2=$ | 212. $(7 \times 7)-(3+8)=$ |
| 213. $8+1^{2}+9+5^{2}=$ | 214. $(9 \times 1)-(7+6)=$ |
| 215. $1(3+1)=$ | 216. $(8+3) \div 1=$ |
| 217. $(7 \times 2)-(2+6)=$ | 218. $6 \times 6+8=$ |
| 219. $\left(5^{2}\right) \times\left(5^{2}\right)+3=$ | 220. $9 \times 2 \times 5=$ |

Solve the following.
221. Sandra baby-sat for 14 hours over two weeks. She earned $\$ 4.00$ an hour. What was her gross pay?
$\qquad$
222. How much will Sharon earn if she earns $\$ 4.80$ for each hour worked, works 47 hours, and has payroll deductions of $\$ 65.42$ ?
$\qquad$
223. How much will Brian earn if he earns $\$ 8.20$ per hour and works 30 hours?
$\qquad$
224. Marin's gross pay is $\$ 284.20$. After deductions of $27 \%$ what is her net pay?
$\qquad$
225. If Paul earns $\$ 176.40$ after deductions of $\$ 75.60$ and after working 21 hours what is the hourly rate?
$\qquad$
226. If Amy earns $\$ 253.80$ after working 47 hours what is the hourly rate?
$\qquad$
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?
$\qquad$
228. What is Adam's net pay if he earns $\$ 4.50$ for each hour worked, works 11 hours, and has payroll deductions of $20 \%$ ?
$\qquad$
229. Janet's gross pay is $\$ 288.60$. After deductions of $23 \%$ what is her net pay?
$\qquad$
230. If Jennifer earns $\$ 232.30$ after working 23 hours what is the hourly rate?
$\qquad$
231. How much will David earn if he earns $\$ 14.10$ per hour and works 50 hours?
$\qquad$
232. What is Paul's net pay if he earns $\$ 12.90$ for each hour worked, works 28 hours, and has payroll deductions of $20 \%$ ?
$\qquad$
233. If Adam earns $\$ 153.09$ after deductions of $\$ 65.61$ and after working 27 hours what is the hourly rate?
$\qquad$
234. Ellen baby-sat for 18 hours over two weeks. She earned $\$ 4.80$ an hour. What was her gross pay?
$\qquad$
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?
$\qquad$
236. How much will Marin earn if she earns $\$ 11.00$ for each hour worked, works 31 hours, and has payroll deductions of $\$ 34.10$ ?
$\qquad$
237. If Billy earns $\$ 263.25$ after deductions of $\$ 74.25$ and after working 25 hours what is the hourly rate?
$\qquad$
238. If Amy earns $\$ 569.80$ after working 37 hours what is the hourly rate?
$\qquad$
239. Jackie's gross pay is $\$ 152.00$. After deductions of $19 \%$ what is her net pay?
$\qquad$
240. How much will Paul earn if he earns $\$ 15.10$ per hour and works 46 hours?
$\qquad$

Express the currency values in words.
241. \$38.94 $\qquad$
242. $\$ 61.42$ $\qquad$
243. \$3.32 $\qquad$

## 244. $\$ 77.17$

$\qquad$
245. \$94.58 $\qquad$
246. \$63.10 $\qquad$
247. \$86.58 $\qquad$
248. $\$ 90.85$ $\qquad$
249. \$19.97 $\qquad$
250. \$48.86 $\qquad$

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. $\qquad$ If Marin wanted to buy a deluxe cheeseburger, a milk shake, and an order of Frenchfries, how much would it cost her?
252. $\qquad$ Steven wants to buy a hamburger. How much will it cost him?
253. $\qquad$ 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. $\qquad$ What is the total cost of a hamburger and a cola if the sales tax is five percent?
255. $\qquad$ If Allan buys a hamburger, how much money will he get back if he pays $\$ 10.00$ ?
256. $\qquad$ What is the total cost of a hamburger, a hot dog, and a deluxe cheeseburger if there is a $5 \%$ sales tax?
257. $\qquad$ What is the total cost of a milk shake, a cola, and an ice cream cone if there is a $5 \%$ sales tax?
258. $\qquad$ If Donald wanted to buy a taco and a hot dog, how much would it cost him?
259. $\qquad$ What is the total cost of an order of French-fries if the sales tax is five percent?
260. $\qquad$ Brian wants to buy an ice cream cone. How much will it cost him?

Compare the fractions.
261. $\frac{5}{8} \_\frac{2}{8} \quad$ 262. $\frac{3}{4}-\frac{1}{4}$ 263. $\frac{4}{5}-\frac{2}{5} \quad$ 264. $\frac{2}{3}-\frac{1}{3}$ 265. $\frac{4}{6}-\frac{3}{6}$ 266. $\frac{1}{8} \_\frac{6}{8} \quad$ 267. $\frac{2}{6}-\frac{5}{6}$
268. $\frac{3}{5}$ $\qquad$ 269. $\frac{1}{3}$ $\qquad$ 270. $\frac{1}{5}$ $\qquad$ $\frac{2}{5}$

Compare the fractions.
271. $\frac{1}{5}-\frac{3}{4}$
272. $\frac{1}{8}-\frac{2}{3}$
273. $\frac{2}{3}$ $\qquad$ 274. $\frac{1}{5}$
$\frac{1}{5}-\frac{7}{8}$
275. $\frac{5}{6}$ $\qquad$ 276. $\frac{1}{4}$ $\qquad$ 277. $\frac{2}{3}$ $\qquad$
278. $\frac{3}{5}$ $\qquad$ 279. $\frac{4}{6}-\frac{1}{3}$ 280. $\frac{2}{8}$ $\frac{2}{8}-\frac{2}{5}$ $\frac{2}{5}$

Divide.
281. $6 \div \frac{1}{5}=$ $\qquad$ 282. $7 \div \frac{2}{3}=$ $\qquad$ 283. $6 \div \frac{1}{6}=$ $\qquad$ 284. $7 \div \frac{2}{4}=$ $\qquad$
285. $8 \div \frac{1}{4}=$ $\qquad$ 286. $4 \div \frac{5}{6}=$ $\qquad$ 287. $5 \div \frac{2}{8}=$ $\qquad$ 288. $5 \div \frac{1}{5}=$ $\qquad$
289. $1 \div \frac{2}{3}=$ $\qquad$ 290. $5 \div \frac{1}{6}=$ $\qquad$

Complete the equivalent fractions.
291. $\frac{1}{5}=\overline{45}$
292. $\overline{3}=\frac{8}{12}$
293. $\overline{8}=\frac{24}{48}$
294. $\frac{2}{4}=\frac{}{20}$
295. $\overline{4}=\frac{8}{16}$
296. $\frac{1}{6}=\frac{}{30}$
297. $\frac{1}{3}=\frac{}{18}$
298. ${ }_{5}=\frac{21}{35}$
299. $\overline{8}=\frac{4}{16}$
300. $\overline{6}=\frac{9}{54}$

Color the fraction.
301.

304.

302.

305.

303.

$\qquad$ - $\qquad$
306.

307.

$=$ 308.


310.


## Color the fraction.

311. $\square$
$\qquad$ 312. $\square=$ $\qquad$ 313. $\qquad$
312. $\square$
$\qquad$ 315. $\square$
$\qquad$ 316. $\qquad$
313. $\square$
$\qquad$
314. 


$\qquad$
319.
$\qquad$
320. $\square$
$\qquad$

Find the sum.
321. $\frac{2}{3}+\frac{2}{3}=$ $\qquad$ 322. $\frac{1}{5}+\frac{4}{5}=$ $\qquad$ 323. $\frac{2}{4}+\frac{1}{4}=$ $\qquad$ 324. $\frac{5}{8}+\frac{2}{8}=$ $\qquad$
325. $\frac{3}{6}+\frac{1}{6}=$ $\qquad$ 326. $\frac{2}{8}+\frac{6}{8}=$ $\qquad$ 327. $\frac{3}{6}+\frac{4}{6}=$ $\qquad$ 328. $\frac{1}{4}+\frac{1}{4}=$ $\qquad$
329. $\frac{4}{8}+\frac{2}{8}=$ $\qquad$ 330. $\frac{1}{5}+\frac{3}{5}=$ $\qquad$

Convert.
$\square$ 332. $\frac{2}{4}=$ $\qquad$ 333. $\frac{1}{3}=$ $\qquad$ 334. $\frac{3}{4}=$ $\qquad$ 335. $\frac{2}{6}=$ $\qquad$
336. $\frac{5}{8}=$ $\qquad$ 337. $\frac{1}{5}=$ $\qquad$ 338. $\frac{2}{3}=$ $\qquad$ 339. $\frac{4}{5}=$ $\qquad$ 340. $\frac{3}{8}=$ $\qquad$

Find the product.
341. $\frac{1}{6} \times \frac{4}{6}=$ 342. $\frac{2}{6} \times \frac{4}{6}=$ $\qquad$ 343. $\frac{4}{8} \times \frac{3}{8}=$ $\qquad$ 344. $\frac{1}{5} \times \frac{1}{5}=$ $\qquad$ 345. $\frac{3}{4} \times \frac{1}{4}=$ $\qquad$ 346. $\frac{1}{3} \times \frac{1}{3}=\quad$ 347. $\frac{2}{4} \times \frac{3}{4}=$ $\qquad$ 348. $\frac{2}{5} \times \frac{4}{5}=$ $\qquad$ 349. $\frac{3}{6} \times \frac{4}{6}=$ $\qquad$ 350. $\frac{4}{8} \times \frac{4}{8}=$ $\qquad$

Find the difference.
351. $\frac{3}{4}-\frac{1}{4}=$ $\qquad$ 352. $\frac{2}{3}-\frac{1}{3}=$ $\qquad$ 353. $\frac{4}{5}-\frac{2}{5}=$ $\qquad$ 354. $\frac{4}{8}-\frac{2}{8}=$ $\qquad$ 355. $\frac{5}{6}-\frac{4}{6}=$ $\qquad$ 356. $\frac{4}{6}-\frac{1}{6}=\quad$ 357. $\frac{3}{5}-\frac{1}{5}=$ $\qquad$ 358. $\frac{3}{4}-\frac{2}{4}=$ $\qquad$ 359. $\frac{7}{8}-\frac{3}{8}=$ $\qquad$ 360. $\frac{4}{5}-\frac{3}{5}=$ $\qquad$

Convert to improper fractions.
 367. $5 \frac{1}{5}=$ 368. $8 \frac{7}{8}=\quad$ 369. $9 \frac{1}{4}=\quad$ 370. $2 \frac{4}{5}=$

Calculate.
371. $7 \frac{1}{8}+2 \frac{5}{8}=$ $\qquad$ 372. $6 \frac{1}{3}+9 \frac{2}{3}=$ $\qquad$ 373. $7 \frac{2}{5}+2 \frac{1}{5}=$ $\qquad$ 374. $5 \frac{3}{4}+2 \frac{2}{4}=$ $\qquad$
375. $8 \frac{4}{5}+6 \frac{1}{5}=$ 376. $4 \frac{6}{8}+7 \frac{6}{8}=$ $\qquad$ 378. $8 \frac{3}{4}+8 \frac{1}{4}=$ $\qquad$
379. $4 \frac{1}{3}+7 \frac{2}{3}=$ $\qquad$ 380. $2 \frac{7}{8}+9 \frac{2}{8}=$ $\qquad$

Multiply.
381. $\frac{4}{6}$ of $8=$ $\qquad$ 382. $\frac{4}{5}$ of $8=$ $\qquad$
385. $\frac{2}{3}$ of $6=$ $\qquad$ 386. $\frac{2}{6}$ of $2=$ $\qquad$
389. $\frac{1}{4}$ of $3=$ $\qquad$ 390. $\frac{3}{8}$ of $6=$ $\qquad$ 383. $\frac{6}{8}$ of $6=$ $\qquad$ 384. $\frac{2}{8}$ of $6=$ $\qquad$ 387. $\frac{3}{5}$ of $2=$ $\qquad$ 388. $\frac{1}{4}$ of $1=$

Simplify the fractions.
391. $\frac{32}{40}=$
392. $\frac{4}{12}=$ $\qquad$ 393. $\frac{4}{32}=$ $\qquad$ 394. $\frac{12}{16}=$ $\qquad$
397. $\frac{6}{48}=$ $\qquad$ 399. $\frac{3}{9}=$ $\qquad$ 400. $\frac{28}{42}=$ $\qquad$ 395. $\frac{8}{24}=$ $\qquad$ 396. $\frac{10}{15}=$ $\qquad$

Classify each the angles.
401.

402.

406.

409.

410.

$\qquad$

## Measure the rectangles.


412.

413.

414.

415.

416.

417.

418.

419.



Find the perimeter and area
421.

422.

423.

424.

425.

426.

427.

428.

$\qquad$
429.

$\qquad$
431.

$\qquad$
433.

$\qquad$
434.

435.

436.

437.

438.

439.

440.


Identify the polygons.
441.

442.

443.

444.

445.

446.

447.

448.

449.

450.

$\qquad$

Find the volume and surface area of each shape.
451.

452.

453.

454.

455.

456.

457.

458.

459.

460.


## Determine the number of cubes.

461. 


463.

462.

464.

465.

467.

468.

469.

470.


Complete the graph.
471.


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

Complete the graph.
472.


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.
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 |

Convert the given measures to new units.
475. 13 km = $\qquad$ mm 477. $30 \mathrm{~mm}=$ $\qquad$ km km mm
481. $57 \mathrm{~km}=$ $\qquad$ 483. $12 \mathrm{~m}=$ $\qquad$ 485. $82 \mathrm{~km}=$ $\qquad$ 487. $27 \mathrm{~mm}=$ $\qquad$ km 488. $82 \mathrm{~m}=$ $\qquad$
489. $82 \mathrm{~mm}=$ $\qquad$ km 490. $27 \mathrm{~m}=$ $\qquad$
491. $10 \mathrm{~m}=$ $\qquad$ km 492. $78 \mathrm{~mm}=$ $\qquad$ 493. $35 \mathrm{~m}=$ $\qquad$ km 494. $57 \mathrm{~m}=$ $\qquad$ km

Convert the given measures to new units.

| 495. $24 \mathrm{mg}=$ | g | 496. $16 \mathrm{mg}=$ | g |
| :---: | :---: | :---: | :---: |
| 497. $78 \mathrm{~g}=$ | mg | 498. $52 \mathrm{~g}=$ | mg |
| 499. $83 \mathrm{mg}=$ | g | 500. $96 \mathrm{mg}=$ | g |
| 501. $34 \mathrm{mg}=$ | g | 502. $69 \mathrm{~g}=$ | mg |
| 503. $64 \mathrm{~g}=$ | mg | 504. $42 \mathrm{~g}=$ | mg |

Convert the given measures to new units.
505. $12 \mathrm{~g}=$ $\qquad$ kg 506. $45 \mathrm{~kg}=$ $\qquad$
507. $72 \mathrm{~g}=$ $\qquad$ kg 508. $56 \mathrm{~kg}=$ $\qquad$
509. $76 \mathrm{~g}=$ $\qquad$ kg $510.58 \mathrm{~kg}=$ $\qquad$
511. $78 \mathrm{~g}=$ $\qquad$ kg 512. $95 \mathrm{~g}=$ $\qquad$
513. $28 \mathrm{~kg}=$ $\qquad$ g 514. $60 \mathrm{~kg}=$ $\qquad$

Convert the given measures to new units.
515. $31 \mathrm{~kg} \mathrm{=}$ $\qquad$ t 516. $50 \mathrm{t}=$ $\qquad$
517. $48 \mathrm{t}=$ $\qquad$ kg 518. $89 \mathrm{~kg}=$ $\qquad$
519. $61 \mathrm{~kg}=$ $\qquad$ t 520. $34 \mathrm{t}=$ $\qquad$
521. $81 \mathrm{~kg}=$ $\qquad$ t 522. $58 \mathrm{t}=$ $\qquad$
523. $31 \mathrm{t}=$ $\qquad$ kg 524. $27 \mathrm{~kg}=$ $\qquad$

Identify the temperature for each thermometer.
525.

526.

527. 

(120
528.

${ }^{\circ} \mathrm{C}$
529.

| 100 120 |  |
| :---: | :---: |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

$\qquad$ ${ }^{\circ} \mathrm{C}$
530.

${ }^{\circ} \mathrm{C}$
531.

532.

533.

${ }^{\circ} \mathrm{C}$
534.
(20
${ }^{\circ} \mathrm{C}$

Calculate the powers below.
535. $21^{3}=$ $\qquad$ 536. $9^{3}=$ $\qquad$ 537. $2^{4}=$ $\qquad$ 538. $22^{3}=$ $\qquad$
539. $11^{4}=$ $\qquad$ 540. $2^{2}=$ $\qquad$ 541. $2^{3}=$ $\qquad$ 542. $10^{4}=$ $\qquad$
543. $23^{3}=$ $\qquad$ 544. $21^{4}=$ $\qquad$

Identify where each set of points should be placed on the number lines below.
545. $0.7 \quad 0.9 \quad 1.7 \quad 0.5$

546.


## 547. $1.9 \quad 1.4 \quad 1.2 \quad 1.6$


548. $0.2 \quad 1.6 \quad 0.9 \quad 1.2$

549. $0.6 \quad 0.9 \quad 1.1 \quad 0.2$

550. $0.8 \quad 1.5 \quad 1.1 \quad 0.3$

551. $1.4 \quad 0.9 \quad 1.7 \quad 0.5$

552. $1.8 \quad 0.6 \quad 0.8 \quad 0.1$

553. $1.5 \quad 1.8 \quad 0.6 \quad 0.2$

554. $1.6 \quad 1.4 \quad 1 \quad 0.1$


Identify where each set of points should be placed on the number lines below.
555. $\quad \frac{7}{8} \quad 1 \frac{3}{8} \quad \frac{1}{8} \quad 1 \frac{7}{8}$

556. $\frac{9}{10} \quad 1 \frac{2}{5} \quad \frac{1}{5} \quad \frac{1}{2}$

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

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

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

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

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

562.
$\begin{array}{llll}1 \frac{3}{8} & \frac{5}{8} & 1 & \frac{1}{8}\end{array}$

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

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


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

576. Count by 3 from 9 to 36

577. Count by 9 from 2 to 83

|  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

578. Count by 4 from 8 to 44

579. Count by 4 from 4 to 40

|  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

580. Count by 6 from 5 to 59

|  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

581. Count by 4 from 6 to 42

|  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

582. Count by 9 from 1 to 82

|  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

583. Count by 3 from 5 to 32

|  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

584. Count by 4 from 3 to 39

|  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Write each value in words.
585. 2,028 $\qquad$
586. 7,465 $\qquad$
587. 6,872 $\qquad$
588. 9,788 $\qquad$
589. 2,372 $\qquad$
590. 4,382 $\qquad$
591. 8,376 $\qquad$
592. 2,400 $\qquad$
593. 5,359 $\qquad$
594. 4,007 $\qquad$

Provide the standard notation for each value.
595. $\qquad$ four thousand seven hundred fifty-nine
596. $\qquad$ one thousand seven hundred ninety-one
597. $\qquad$ five thousand three hundred eleven
598. $\qquad$ two hundred
599. $\qquad$ five thousand three hundred forty-one
600. $\qquad$ two thousand eight hundred ninety-three
601. $\qquad$ two hundred three
602. $\qquad$ six thousand two hundred sixty-eight
603. $\qquad$ nine thousand six hundred eighty-nine
604. $\qquad$ 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 |
| 610. 536 | 611. 702 | 612. 203 | 613. 735 | 614. 556 |
| 762 | 891 | 436 | 556 | 398 |
| 445 | 594 | 196 | 541 | 420 |
| 240 | 117 | 881 | 204 | 531 |
| 126 | 617 | 759 | 926 | 209 |
| 393 | 224 | 551 | 182 | 780 |

Convert.
615. $63 \frac{1}{4} \%=$ $\qquad$ 616. $88 \%=$ $\qquad$ 617. $31 \frac{2}{5} \%=$ $\qquad$
618. $11 \frac{5}{10} \%=$ $\qquad$
619. $68 \frac{3}{4} \%=$ $\qquad$ 620. $18 \frac{4}{5} \%=$ $\qquad$
621. $97 \frac{7}{10} \%=$ $\qquad$ 622. $79 \frac{1}{2} \%=$ $\qquad$ 623. $89 \frac{1}{2} \%=$ $\qquad$
624. $38 \frac{3}{5} \%=$ $\qquad$

Convert each decimal to a percentage.

| 625. $0.248=$ | 626. $0.69=$ | 627. $0.335=$ |
| :---: | :---: | :---: |
| 628. $0.825=$ | 629. $0.393=$ | 630. $0.932=$ |
| 631. $0.33=$ | 632. $0.786=$ | 633. $0.08=$ |
| 634. $0.212=$ |  |  |

Convert each percentage to a decimal and vice versa.
635. $19 \frac{1}{4} \%=$ $\qquad$ 636. $64 \frac{3}{10} \%=$ $\qquad$ 637. $0.992=$ $\qquad$
638. $15 \%=$ $\qquad$ 639. $0.934=$ $\qquad$ 640. $0.325=$ $\qquad$
641. $32 \frac{2}{5} \%=$ $\qquad$ 642. $7 \frac{2}{4} \%=$ $\qquad$ 643. $81 \frac{1}{10} \%=$ $\qquad$
644. $88 \frac{4}{5} \%=$ $\qquad$

Calculate the given percent of each value.
645. $10 \%$ of $308=$ $\qquad$ 646. $10 \%$ of $389=$ $\qquad$ 647. $10 \%$ of $42=$ $\qquad$
648. $10 \%$ of $2=$ $\qquad$ 649. $10 \%$ of $133=$ $\qquad$ 650. $10 \%$ of $769=$ $\qquad$
651. $10 \%$ of $94=$ $\qquad$ 652. $10 \%$ of $81=$ $\qquad$ 653. $10 \%$ of $391=$ $\qquad$
654. $10 \%$ of $33=$ $\qquad$

Calculate the given percent of each value.
655. $90 \%$ of $711=$ $\qquad$
658. $86 \%$ of $58=$ $\qquad$ 656. $73 \%$ of $2=$ $\qquad$ 657. $50 \%$ of $2=$ $\qquad$
660. $85 \%$ of $92=$ $\qquad$
661. $14 \%$ of $2=$ $\qquad$ 662. $57 \%$ of $3=$ $\qquad$ 663. $92 \%$ of $59=$ $\qquad$
664. $22 \%$ of $42=$ $\qquad$

## Provide the conversions for each ratio.

665. 

|  | Ratio | Fractio <br> n | Percent | Decima <br> 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 <br> n | Percent | Decima <br> 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.

| $\boldsymbol{+}$ | 6 | 9 | 1 | 3 | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 8 |  |  |  |  |  |
| 5 |  |  |  |  |  |
| 6 |  |  |  |  |  |
| 4 |  |  |  |  |  |
| 3 |  |  |  |  |  |

668. 

| $\boldsymbol{+}$ | 1 | 5 | 7 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 4 |  |  |  |  |  |
| 6 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 8 |  |  |  |  |  |

Complete the table.
669.

| $\div$ | 80 | 59 | 92 | 85 | 54 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 7 |  |  |  |  |  |
| 5 |  |  |  |  |  |
| 6 |  |  |  |  |  |
| 4 |  |  |  |  |  |
| 2 |  |  |  |  |  |

670. 

| $\div$ | 59 | 35 | 28 | 45 | 77 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 8 |  |  |  |  |  |
| 7 |  |  |  |  |  |
| 4 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 2 |  |  |  |  |  |

Complete the table.

671. | $\mathbf{x}$ | 2 | 4 | 11 | 8 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3 |  |  |  |  |  |
| 7 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 10 |  |  |  |  |  |
| 4 |  |  |  |  |  |
672. 

| $\mathbf{x}$ | 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.

676.

677.

678.

681.

684.


Show the time for each clock.

688.

679.

682.

683.

687.

690.

691.

692.

693.

694.


Show the time for each clock.

696.

699.

702.

697.

700.

703.

704.


Show the time for each clock.

708.

711.


709.

712.


710.

713.

714.


Show the time for each clock.
715.

718.

721.

724.


Show the time for each clock.
725.

728.

731.

734.


Convert the given measures of time to alternate measures of time.
735. 93 min $=$ $\qquad$ 736. $84 \mathrm{hr}=$ $\qquad$ 737. $36 \mathrm{hr}=$ $\qquad$
738. $83 \mathrm{~min}=$ $\qquad$ 739. 22 min $=$ $\qquad$ 740. $93 \mathrm{hr}=$ $\qquad$
741. $62 \mathrm{~min}=$ $\qquad$ 742. $77 \mathrm{hr}=$ $\qquad$ 743. $62 \mathrm{hr}=$ $\qquad$
744. $29 \mathrm{hr}=$ $\qquad$

Draw the clock hands to show the passage of time.
745.


What time will it be in 4 hours 11 minutes?
747.


What time will it be in 3 hours 19 minutes?
749.


What time will it be in 1 hour 42 minutes?
751.


What time will it be in 1 hour 31 minutes?
746.


What time will it be in 2 hours 17 minutes?
748.


What time will it be in 4 hours 26 minutes?

750


What time will it be in 1 hour 1 minute?
752.

753.


What time will it be in 3 hours 43 minutes?
754.


Draw the clock hands to show the passage of time.
755.


What time was it 5 hours 10 minutes ago?
757.


What time was it 5 hours 3 minutes ago?
759.


What time was it 1 hour 35 minutes ago?
756.


What time was it 2 hours 26 minutes ago?
758.


What time was it 5 hours 46 minutes ago?
760.

761.


What time was it 4 hours 15 minutes ago?
763.


What time was it 2 hours 19 minutes ago?
762.

764.


Draw the clock hands to show the passage of time.
765.


What time was it 1 hour 49 minutes ago?
767.


What time was it 2 hours 48 minutes ago?
766.

768.

769.


What time was it 2 hours 26 minutes ago?
771.


What time will it be in 4 hours 13 minutes?
773.

770.

772.


What time was it 4 hours 10 minutes ago?

774

775. In the space below sketch a map from school to your home. It does not need to be to scale.
776. In the space below sketch a plan of the school. It does not need to be to scale.

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

782. The walls of a room are to be painted with two coats of paint. The area of the walls is $25 \mathrm{~m}^{2}$. Correct application of the paint requires 100 mL of paint per square metre. Calculate how many litres of paint will be required.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
783. A front lawn has an area of $225 \mathrm{~m}^{2}$. A pesticide to remove weeds is sprayed onto the lawn at a rate of 50 mL per square metre. How much pesticide is required to complete the task?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
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 50 g per square metre. The bags of fertiliser are 10 kg . How many square metres of lawn will be fertilised with 2 bags of lawn food?
785. Draw the named shapes in the boxes below.

| Equilateral <br> Triangle | Isosceles <br> Triangle | Right <br> Triangle | Scalene <br> 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) $\qquad$
B) $\qquad$
C) $\qquad$ D) $\qquad$
E)
F) $\qquad$
G) $\qquad$ H) $\qquad$
I) $\qquad$
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 | 500 g |  |  |  |  |
| Minced Meat (beef or <br> chicken) | 400 g |  |  |  |  |
| Pasta Sauce | 350 mL |  |  |  |  |
| Parmesan Cheese | 150 g |  |  |  |  |
| 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

| TOOWONG <br> VILLAGE \& TOWER |  |
| :---: | :---: |
| PARKING RATES |  |
| TIME | RATE |
| $0-2.0 \mathrm{hrs}$ | FREE |
| $2.0-2.5 \mathrm{hrs}$ | \$ 2.00 |
| $2.5-3.0 \mathrm{hrs}$ | \$ 3.00 |
| $3.0-3.5 \mathrm{hrs}$ | \$ 4.00 |
| $3.5-4.0 \mathrm{hrs}$ | \$ 6.00 |
| $4.0-4.5 \mathrm{hrs}$ | \$ 10.00 |
| $4.5-5.0 \mathrm{hrs}$ | \$ 15.00 |
| $5.0-5.5 \mathrm{hrs}$ | \$20.00 |
| $5.5-6.0 \mathrm{hrs}$ | \$ 25.00 |
| $6.0-6.5 \mathrm{hrs}$ | \$ 35.00 |
| $6.5-7.0 \mathrm{hrs}$ | \$40.00 |
| 7+ hrs | \$49.00 |
| Midnight - 7am | \$20.00 |
| Staff (parked in allocated staff parking area) | $\begin{aligned} & \$ 4.00 \\ & \text { per day } \end{aligned}$ |

2 HOURS FREE PARKING
FREE PARKING WITH ENTRY AFTER 6PM
a) What is the cost of parking for 3 hours?
b) 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?
$\qquad$
$\qquad$
$\qquad$
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 11 th street run?
b) What is the direction of the police station from the Lifeguard tower?
$\qquad$
c) Which is closer to the toilets, the police station or The Edge theater?
$\qquad$
d) Using the scale, how far is the Kenmore Hotel from the Cardozo Hotel?

Find the sum.

1. 29
$\begin{array}{r}+45 \\ \hline 74 \\ \hline\end{array}$

$$
74
$$

2. 

. 50
3. 96
5.
$\begin{array}{r}22 \\ +\quad 28 \\ \hline 50 \\ \hline\end{array}$
6. 58
$\begin{array}{r}+52 \\ +110 \\ \hline\end{array}$
7. 49
8. 52
$\begin{array}{r}+85 \\ \hline 135 \\ \hline\end{array}$

$$
\begin{array}{r}
+26 \\
\hline 122 \\
\hline
\end{array}
$$

4. 35
$\begin{array}{r}+63 \\ \hline 98\end{array}$
$\begin{array}{r}+\quad 79 \\ \hline 128 \\ \hline\end{array}$
$\begin{array}{r}+89 \\ +141 \\ \hline\end{array}$
5. 60 10. 57
$\begin{array}{r}+11 \\ \hline 71 \\ \hline\end{array}$

Find the sum.
11. 670
12. 401
13. 551
14. 845
15. 703
16. 650
17. 802
$\begin{array}{r}+\quad 208 \\ \hline 878 \\ \hline\end{array}$ $\begin{array}{r}+263 \\ +664 \\ \hline\end{array}$
$\begin{array}{r}+\quad 238 \\ +789 \\ \hline\end{array}$
$\begin{array}{r}+112 \\ \hline 957 \\ \hline\end{array}$
$\begin{array}{r}+\quad 117 \\ \hline 767 \\ \hline\end{array}$
$\begin{array}{r}+\quad 182 \\ \hline 984 \\ \hline\end{array}$
18.
$\begin{array}{r}+213 \\ \hline 434 \\ \hline\end{array}$
19. 625
20. 107
$\begin{array}{r}+\quad 104 \\ \hline 729\end{array}$

$$
\begin{array}{r}
+222 \\
\hline 329 \\
\hline
\end{array}
$$

Find the quotient.

$$
21
$$

$$
2 \stackrel{1}{2}
$$ 22.

$4 \longdiv { 3 }$
23.
$4 \longdiv { 6 4 }$
24.
$\begin{array}{rr}4 & 4 . \\ & \frac{8}{32} \\ 1 \longdiv { 8 }\end{array}$
26. $\frac{2}{5} \stackrel{27 .}{10} \sqrt{3}$
28.
8. $3 \longdiv { 1 2 }$
29. $3 \longdiv { 2 1 } \quad 3 0 . \quad \frac { 1 } { 8 }$

Find the product.
31.

$$
\begin{array}{r}
\times \quad 5 \\
\hline 75 \\
\hline 8 \\
\times 6 \\
\times \quad 40 \\
\hline 48 \\
\hline
\end{array} \begin{array}{r}
\times 2 \\
\hline 26 \\
\hline
\end{array}
$$

Find the product.
41. 1. $\begin{array}{r}92 \\ \times 42 \\ \hline 3,864 \\ \hline\end{array} \begin{array}{r}26 \\ \times 43 \\ \hline 1,118 \\ \hline\end{array}$ 43. $\begin{array}{r}78 \\ \times \quad 12 \\ \hline 936 \\ \hline\end{array}$ 44. 21 45. 21 46. $\begin{array}{r}24 \\ \times 47 \\ \times \quad 95 \\ \times 19 \\ \hline 1,008 \\ \hline\end{array}$ 48. 54 $\begin{array}{r}\times 14 \\ \hline 294 \\ \hline\end{array}$ $\begin{array}{r}\mathbf{2 1} \\ \times \quad 55 \\ \hline\end{array}$ $\begin{array}{r}\times 73 \\ \hline 3,942 \\ \hline\end{array}$
49. $60 \quad 50.61$

$$
\begin{array}{r}
\times 14 \\
\hline 840 \\
\hline
\end{array}
$$

Find the difference.
51.
$\begin{array}{r}-40 \\ -4 \\ \hline\end{array}$
52.
39
53.
29
54. 40
55. 57
56. 25
57. 19
58. 14 59. 93
$\begin{array}{r}-40 \\ -4 \\ \hline\end{array}$
$\begin{array}{r}-14 \\ -\quad-34 \\ \hline\end{array}$
$\begin{array}{r}-16 \\ -9 \\ \hline\end{array}$
$\begin{array}{r}-15 \\ -4 \\ \hline\end{array}$
-13
-1
-40
-53
60. 95
$\begin{array}{r}-44 \\ -51 \\ \hline\end{array}$

Find the difference.
61 400-62 720
63. 600
64. 780
65. 560
66. 580
67. 700
68. 640
$\begin{array}{lllllll}-338 \\ -62 & \frac{-364}{356} & -\frac{-479}{121} & \frac{-396}{384} & \frac{-285}{275} & \frac{-498}{82} & \frac{-354}{346}\end{array}$
69. 83070.240

$$
\begin{array}{r}
-269 \\
\hline 561 \\
\hline
\end{array}
$$

Find the sum.

| 71. 59 | 2. 31 | 73. 61 | 74. 90 | 75. 37 | 76. 48 | 77. 37 | 78. 18 | 79. 21 | 80. 93 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 28 | 56 | 38 | 81 | 95 | 78 | 94 | 46 | 93 | 77 |
| 17 | 52 | 80 | 92 | 85 | 65 | 58 | 77 | 58 | 52 |
| 26 | 81 | 29 | 51 | 94 | 68 | 43 | 29 | 44 | 50 |
| 29 | 34 | 94 | 12 | 64 | 97 | 99 | 99 | 18 | 57 |
| 159 | 254 | 302 | 326 | 375 | 356 | 331 | 269 | 234 | 329 |

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?
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

Solve.
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? 6
94. A box of oranges weighs 35 pounds. If one orange weighs five pounds, how many oranges are there in the box?

7
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?

9
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?

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.
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? 6
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? 27
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? 12

Solve.
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?
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?

1
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?

6
119. Two apples are in the basket. Two are red and the rest are green. How many apples are green?

0
120. Sharon has one fewer ball than Marcie. Marcie has six balls. How many balls does Sharon have?

5

Find the solution.
121. $6 \times 3+1=19$
123. $(9+9)^{2}=324$
125. $(8+3) \times(1+4)=55$
127. $6+1^{2}+8+1^{2}=16$
129. $5+5+8+6=24$
131. $7 \times(8+2)=70$
126. $7+7-1+6=19$
122. $5(5+8)=65$
124. $4+4+3+1=12$
128. $(5+8)^{2}+(2+7)^{2}=\underline{250}$
130. $(6+6)^{2}+(2+2)^{2}=160$
132. $(3+5) \times(5+2)=56$

| 133. $(7+6)^{2}+(1+6)^{2}=\underline{218}$ | 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. $3 \times 5+8=\underline{23}$ |
| 139. $(5+7)^{2}+(4+2)^{2}=\underline{180}$ | 140. $(1+9) \div 7=1.429$ |
| 141. $9 \times 6+7=\underline{61}$ | 142. $1 \times 1+8=9$ |
| 143. $(2+4) \div 4=1.5$ | 144. $(2+8) \div 4=2.5$ |
| 145. $9(9+2)=99$ | 146. $(4+4)^{2}+(5+7)^{2}=\underline{208}$ |
| 147. $\left(7^{2}\right) \times\left(8^{2}\right)+7=3,143$ | 148. $5+6^{2}=\underline{41}$ |
| 149. $(3+1) \times(4+2)=24$ | 150. $\left(9^{2}\right) \times\left(6^{2}\right)+4=\underline{2,920}$ |
| 151. $3+4^{2}+8+6^{2}=63$ | 152. $2+4+3+1=10$ |
| 153. $6 \times 3 \times 5=90$ | 154. $6 \times 5 \times 8=\underline{240}$ |
| 155. $(8+5)(9+4)=169$ | 156. $(3+1)^{2}+(7+4)^{2}=\underline{137}$ |
| 157. $3+9^{2}+3+2^{2}=91$ | 158. $(1+7)^{2}+(1+5)^{2}=100$ |
| 159. $9+5+8+8=30$ | 160. $5 \times(1+1)=10$ |
| 161. $3+9^{2}=84$ | 162. $\left(9^{2}\right) \times\left(2^{2}\right)+4=328$ |
| 163. $(1+4) \div 3=\underline{1.667}$ | 164. $(1+1)(8+5)=\underline{26}$ |
| 165. $5(4+8)=60$ | 166. $7 \times 5+6=41$ |
| 167. $9 \times(2+9)=99$ | 168. $4+1+4+5=14$ |
| 169. $1 \times 2+4=\underline{6}$ | 170. $(1+8)^{2}+(7+3)^{2}=\underline{181}$ |
| 171. $(7+5)^{2}+(6+4)^{2}=\underline{244}$ | 172. $3 \times 9+4=31$ |
| 173. $4+8^{2}=68$ | 174. $6 \times(2+1)=18$ |
| 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. $6+7+3+8=\underline{24}$ | 180. $(1+2)^{2}=9$ |
| 181. $3 \times(3+5)=24$ | 182. $7+1-8+4=4$ |
| 183. $(4+6) \div 3=3.333$ | 184. $6 \times(3+3)=36$ |
| 185. $2+9-2+3=12$ | 186. $6 \times 1+3=9$ |
| 187. $(3+5)^{2}=64$ | 188. $5(7+8)=75$ |
| 189. $4(7+4)=44$ | 190. $(6+3)^{2}=81$ |
| 191. $1 \times(5+8)=13$ | 192. $\left(5^{2}\right) \times\left(9^{2}\right)+8=\underline{2,033}$ |
| 193. $7 \times 5+4=\underline{39}$ | 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. $8+8^{2}=72$ |
| 199. $(9+7) \div 8=\underline{2}$ | 200. $8 \times 9 \times 7=\underline{504}$ |
| 201. $1+9^{2}=\underline{82}$ | 202. $\left(7^{2}\right) \times\left(4^{2}\right)+2=786$ |
| 203. $(1+5) \div 8=0.75$ | 204. $2+2^{2}+4+7^{2}=59$ |
| 205. $2 \times 7+5=19$ | 206. $5+8^{2}=69$ |
| 207. $(3+6)^{2}=81$ | 208. $9+4^{2}=25$ |
| 209. $2+8-3+6=13$ | 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. $\left(5^{2}\right) \times\left(5^{2}\right)+3=628$ | 220. $9 \times 2 \times 5=90$ |

$$
\text { 177. }(5+9)^{2}=196
$$

$$
\text { 179. } 6+7+3+8=24
$$

$$
\text { 181. } 3 \times(3+5)=24
$$

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

$$
\text { 185. } 2+9-2+3=12
$$

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

$$
\text { 189. } 4(7+4)=44
$$

$$
\text { 191. } 1 \times(5+8)=13
$$

$$
\text { 193. } 7 \times 5+4=39
$$

$$
\text { 195. }(4+7)(9+9)=198
$$

$$
\text { 197. } 5 \times 4 \times 7=140
$$

$$
\text { 199. }(9+7) \div 8=\underline{2}
$$

$$
\text { 201. } 1+9^{2}=82
$$

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

$$
\text { 204. } 2+2^{2}+4+7^{2}=59
$$

$$
\text { 206. } 5+8^{2}=69
$$

$$
\text { 208. } 9+4^{2}=25
$$

$$
\text { 210. }(1+6)(3+9)=84
$$

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

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

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

$$
\text { 218. } 6 \times 6+8=44
$$

$$
\text { 220. } 9 \times 2 \times 5=90
$$

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. $\$ 19.97$ nineteen dollars ninety-seven cents
250. $\$ 48.86$ forty-eight dollars eighty-six cents

Solve.

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

251. \$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. $\$ 5.40$ 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. \$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. $\$ 5.36$ 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.
$\begin{array}{lllllllllllllllll}\text { 261. } \frac{5}{8} \geq \frac{2}{8} & \text { 262. } \frac{3}{4} \geq \frac{1}{4} & \text { 263. } \frac{4}{5} \geq \frac{2}{5} & \text { 264. } \frac{2}{3} \geq \frac{1}{3} & \text { 265. } \frac{4}{6} \geq \frac{3}{6} & \text { 266. } \frac{1}{8} \leq \frac{6}{8} & \text { 267. } \frac{2}{6} \leq \frac{5}{6}\end{array}$ 268. $\frac{3}{5}=\frac{3}{5}$ 269. $\frac{1}{3}=\frac{1}{3} \quad 270 \cdot \frac{1}{5} \leq \frac{2}{5}$

Compare the fractions.
$\begin{array}{llllllllllll}\text { 271. } \frac{1}{5} \leq \frac{3}{4} & \text { 272. } \frac{1}{8} \leq \frac{2}{3} & \text { 273. } \frac{2}{3} \leq \frac{3}{4} & \text { 274. } \frac{1}{5} \leq \frac{7}{8} & 275 & \frac{5}{6} \geq \frac{2}{5} & \text { 276. } \frac{1}{4} \leq \frac{2}{6} & \text { 277. } \frac{2}{3} \geq \frac{2}{8}\end{array}$
278. $\frac{3}{5} \leq \frac{3}{4}$ 279. $\frac{4}{6} \geq \frac{1}{3}$ 280. $\frac{2}{8} \leq \frac{2}{5}$

Divide.

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

Complete the equivalent fractions.
291. $\frac{1}{5}=\frac{9}{45}$
292. $\frac{2}{3}=\frac{8}{12}$
293. $\frac{4}{8}=\frac{24}{48}$
294. $\frac{2}{4}=\frac{10}{20}$
295. $\frac{2}{4}=\frac{8}{16}$
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.
301.

302.

303.

304.

305.

306.

307.

308.


310.


## Color the fraction.

311. $\qquad$ 312. $\square=\frac{1}{2}$ $\qquad$ 313. $\qquad$
312. $\qquad$ $=\frac{2}{3}$ 315. $\qquad$ 316. $\qquad$
313. $\square$ $\frac{1}{3}$
314. $\qquad$ 319. $\qquad$ 320. $\square$

Find the sum.
321. $\frac{2}{3}+\frac{2}{3}=1 \frac{1}{3}$ 322. $\frac{1}{5}+\frac{4}{5}=1$ $\qquad$ 323. $\frac{2}{4}+\frac{1}{4}=\frac{3}{4}$ 324. $\frac{5}{8}+\frac{2}{8}=\frac{7}{8}$ $\qquad$
325. $\frac{3}{6}+\frac{1}{6}=\frac{2}{3}$ $\qquad$ 326. $\frac{2}{8}+\frac{6}{8}=1$ $\qquad$ 327. $\frac{3}{6}+\frac{4}{6}=1 \frac{1}{6}$ 328. $\frac{1}{4}+\frac{1}{4}=\frac{1}{2}$ $\qquad$
329. $\frac{4}{8}+\frac{2}{8}=\frac{3}{4}$ 330. $\frac{1}{5}+\frac{3}{5}=\frac{4}{5}$ $\qquad$

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

Find the product.
341. $\frac{1}{6} \times \frac{4}{6}=\frac{1}{9} \quad$ 342. $\frac{2}{6} \times \frac{4}{6}=\frac{2}{9} \quad$ 343. $\frac{4}{8} \times \frac{3}{8}=\frac{3}{16} \quad$ 344. $\frac{1}{5} \times \frac{1}{5}=\frac{1}{\underline{25}} \quad$ 345. $\frac{3}{4} \times \frac{1}{4}=\frac{3}{16}$
$\begin{array}{llll}\text { 346. } \frac{1}{3} \times \frac{1}{3}=\underline{\frac{1}{9}} & \text { 347. } \frac{2}{4} \times \frac{3}{4}=\underline{\frac{3}{8}} & \text { 348. } \frac{2}{5} \times \frac{4}{5}=\frac{8}{25} & \text { 349. } \frac{3}{6} \times \frac{4}{6}=\underline{\frac{1}{3}}\end{array}$ 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. $\frac{4}{6}-\frac{1}{6}=\underline{\frac{1}{2}}$ 357. $\frac{3}{5}-\frac{1}{5}=\frac{2}{5}$ 358. $\frac{3}{4}-\frac{2}{4}=\frac{1}{4}$ 359. $\frac{7}{8}-\frac{3}{8}=\underline{\frac{1}{2}}$ 360. $\frac{4}{5}-\frac{3}{5}=\frac{1}{5}$

Convert to improper fractions.
361. $1 \frac{4}{6}=\underline{\frac{5}{3}} \quad$ 362. $6 \frac{6}{8}=\underline{\frac{27}{4}}$ 363. $2 \frac{1}{4}=\underline{\frac{9}{4}} \quad$ 364. $5 \frac{2}{8}=\underline{\frac{21}{4}} \quad$ 365. $8 \frac{1}{6}=\underline{49} \quad$ 366. $2 \frac{2}{4}=\frac{5}{2}$ 367. $5 \frac{1}{5}=\frac{26}{5} \quad$ 368. $8 \frac{7}{8}=\underline{71} 8 \quad$ 369. $9 \frac{1}{4}=\frac{37}{4} \quad$ 370. $2 \frac{4}{5}=\frac{14}{5}$

## Calculate.

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



Multiply.
381. $\frac{4}{6}$ of $8=5 \frac{1}{3}$ 382. $\frac{4}{5}$ of $8=\underline{6 \frac{2}{5}}$
383. $\frac{6}{8}$ of $6=4 \frac{1}{2}$
384. $\frac{2}{8}$ of $6=\underline{1 \frac{1}{2}}$
385. $\frac{2}{3}$ of $6=4$ 386. $\frac{2}{6}$ of $2=\frac{2}{3}$ 387. $\frac{3}{5}$ of $2=\underline{1 \frac{1}{5}}$ 388. $\frac{1}{4}$ of $1=\frac{1}{4}$ 389. $\frac{1}{4}$ of $3=\frac{3}{4}$ 390. $\frac{3}{8}$ of $6=2 \frac{1}{4}$

Simplify the fractions.
391. $\frac{32}{40}=\frac{4}{5}$
392. $\frac{4}{12}=\frac{1}{3}$
393. $\frac{4}{32}=\frac{1}{8}$
394. $\frac{12}{16}=\frac{3}{4}$ 395. $\frac{8}{24}=\frac{1}{3}$ 396. $\frac{10}{15}=\frac{2}{3}$
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 angles.
401.


Reflex
404.


Obtuse
407.


Acute
402.

403.


Reflex
406.


Reflex
409.


Acute
410.


Acute

## Measure the rectangles.



413

414.

415.

416.

417.

418.

419.


Find the perimeter and area.
421.

$P=17.65 \mathrm{~cm} \quad A=12 \mathrm{~cm}^{2}$
423.

$P=34.08 \mathrm{~cm} \quad A=48 \mathrm{~cm}^{2}$
425.

$P=29.22 \mathrm{~cm} \quad A=35 \mathrm{~cm}^{2}$
420.

422.


$$
P=39.62 \mathrm{~cm} \quad A=66 \mathrm{~cm}^{2}
$$

424. 


$P=36 \mathrm{~cm} \quad A=81 \mathrm{~cm}^{2}$
426.


$$
P=46 \mathrm{~cm} \quad A=132 \mathrm{~cm}^{2}
$$

427. 


$P=60 \mathrm{~cm} \quad A=221 \mathrm{~cm}^{2}$
429.

$P=29.58 \mathrm{~cm} \quad A=36 \mathrm{~cm}^{2}$
431.

432.


$$
P=22.17 \mathrm{~cm} \quad A=20 \mathrm{~cm}^{2}
$$

434. 


$P=49.76 \mathrm{~cm} \quad A=104 \mathrm{~cm}^{2}$

435


$$
P=36.29 \mathrm{~cm} \quad A=55 \mathrm{~cm}^{2}
$$

436. 



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

437. 



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

439. 


440.


Identify the polygons.


Equilateral Triangle
442.


Parallelogram
443.


Right Triangle
444.


Regular Octagon
447.


Rectangle
445.


Regular Pentagon
448.


Regular Hexagon
446.


## Scalene Triangle

449. 



Isosceles Triangle
450.


Square

Find the volume and surface area of each shape.
451.

$\mathrm{V}=72 \mathrm{~cm}^{3} \quad \mathrm{SA}=108 \mathrm{~cm}^{2}$
452.

$V=90 \mathrm{~cm}^{3} \quad \mathrm{SA}=126 \mathrm{~cm}^{2}$
453.

$V=1,100 \mathrm{~cm}^{3} \quad \mathrm{SA}=640 \mathrm{~cm}^{2}$
454.

$V=100 \mathrm{~cm}^{3} \quad \mathrm{SA}=130 \mathrm{~cm}^{2}$
455.


$$
V=18 \mathrm{~cm}^{3} \quad \mathrm{SA}=42 \mathrm{~cm}^{2}
$$

456. 


$V=36 \mathrm{~cm}^{3} \quad \mathrm{SA}=66 \mathrm{~cm}^{2}$
457.

$\mathrm{V}=48 \mathrm{~cm}^{3} \quad \mathrm{SA}=80 \mathrm{~cm}^{2}$
458.

$V=800 \mathrm{~cm}^{3} \quad \mathrm{SA}=520 \mathrm{~cm}^{2}$
459.

$\mathrm{V}=48 \mathrm{~cm}^{3} \quad \mathrm{SA}=80 \mathrm{~cm}^{2}$
460.

$\mathrm{V}=36 \mathrm{~cm}^{3} \quad \mathrm{SA}=66 \mathrm{~cm}^{2}$

## Determine the number of cubes.

461. 



104 cubic units
462.


76 cubic units
464.

466.

468.


39 cubic units
469.


88 cubic units
470.


102 cubic units

Complete the graph.
471.
$10 \quad$ Graph Title


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 |

X-Axis Title

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 |

Convert the given measures to new units.

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

Convert the given measures to new units.

| 495. $24 \mathrm{mg}=0.024$ | g | 496. | $16 \mathrm{mg}=0.016$ | g |
| :---: | :---: | :---: | :---: | :---: |
| 497. $78 \mathrm{~g}=78,000$ | mg | 498. | $52 \mathrm{~g}=52,000$ | mg |
| 499. $83 \mathrm{mg}=0.083$ | g | 500. | $96 \mathrm{mg}=0.096$ | g |
| 501. $34 \mathrm{mg}=\underline{0.034}$ | g | 502. | $69 \mathrm{~g}=\underline{69,000}$ | mg |
| 503. $64 \mathrm{~g}=64,000$ | mg | 504. | $42 \mathrm{~g}=42,000$ | mg |

Convert the given measures to new units.
505. $12 \mathrm{~g}=0.012$
kg 506. $45 \mathrm{~kg}=\underline{45,000}$
g
507. $72 \mathrm{~g}=0.072$
kg 508. $56 \mathrm{~kg}=\underline{56,000}$
g
509. $76 \mathrm{~g}=0.076$
kg 510. $58 \mathrm{~kg}=\underline{58,000}$
g
511. $78 \mathrm{~g}=0.078$
kg 512. $95 \mathrm{~g}=0.095$
kg
513. $28 \mathrm{~kg}=28,000$
g 514. $60 \mathrm{~kg}=\underline{60,000}$ g

Convert the given measures to new units.
515. $31 \mathrm{~kg}=0.031$
t 516. $50 \mathrm{t}=\underline{50,000}$
517. $48 \mathrm{t}=48,000$
kg 518. $89 \mathrm{~kg}=0.089$
519. $61 \mathrm{~kg}=0.061$
t 520. $34 \mathrm{t}=34,000$
521. $81 \mathrm{~kg}=0.081 \quad \mathrm{t}$
t 522. $58 \mathrm{t}=58,000$
kg
523. $31 \mathrm{t}=31,000$
kg 524. $27 \mathrm{~kg}=0.027$

Identify the temperature for each thermometer.
525.

526.

528. 

(20
529.
8
530.
8
532.

531.
533.

534.


Calculate the powers below.
535. $21^{3}=9,261$
536. $9^{3}=729$
537. $2^{4}=16$
538. $22^{3}=10,648$
539. $11^{4}=14,641$
540. $2^{2}=4$
$\qquad$
$\qquad$ 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.
$\begin{array}{llll}545 & 0.7 & 0.9 & 1.7 \\ 0.5\end{array}$

546. $0.9 \quad 0.5 \quad 1.1 \quad 1.6$


## 547. $1.9 \quad 1.4 \quad 1.2 \quad 1.6$


548. $0.2 \quad 1.6 \quad 0.9 \quad 1.2$

549. $0.6 \quad 0.9 \quad 1.1 \quad 0.2$

550. $0.8 \quad 1.5 \quad 1.1 \quad 0.3$

551. $1.4 \quad 0.9 \quad 1.7 \quad 0.5$

552. $1.8 \quad 0.6 \quad 0.8 \quad 0.1$

553. $1.5 \quad 1.8 \quad 0.6 \quad 0.2$

554. $1.6 \quad 1.4 \quad 1 \quad 0.1$


Identify where each set of points should be placed on the number lines below.
555. $\quad \frac{7}{8} \quad 1 \frac{3}{8} \quad \frac{1}{8} \quad 1 \frac{7}{8}$

556. $\frac{9}{10} \quad 1 \frac{2}{5} \quad \frac{1}{5} \quad \frac{1}{2}$

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

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

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

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

561.

$$
\frac{2}{5} \quad 1 \frac{4}{5} \quad \frac{1}{10} \quad 1
$$


562.
$\begin{array}{llll}1 \frac{3}{8} & \frac{5}{8} & 1 & \frac{1}{8}\end{array}$

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

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


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 | 9 | 11 | 13 | 15 | 17 | 19 | 21 | 23 | 25 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

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

| 5 | 11 | 17 | 23 | 29 | 35 | 41 | 47 | 53 | 59 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

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 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

583. Count by 3 from 5 to 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. $\underline{4,759}$ 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. 827102 | 606. $424 \underline{424}$ | 607. 167167 | 608. 786436 | 609. 156156 |
| :---: | :---: | :---: | :---: | :---: |
| 975216 | 955629 | 963432 | 752441 | 441294 |
| 102428 | 888787 | 771770 | 999619 | 294441 |
| 514514 | 629888 | 770771 | 441752 | 715459 |
| 428827 | 787954 | 817817 | 619786 | 987715 |
| 216975 | 954955 | 432963 | 436999 | 459987 |
| 610. 536126 | 611. 702117 | 612. 203196 | 613. 735182 | 614. $556 \underline{209}$ |
| $762 \underline{240}$ | 891 | 436203 | $556 \underline{204}$ | 398398 |
| 445393 | 594 | 196436 | 541541 | 420420 |
| 240445 | 117617 | 881551 | 204556 | 531 |
| 126536 | 617 | 759759 | 926735 | 209556 |
| 393762 | $224 \underline{891}$ | 551881 | 182926 | 780780 |

Convert.
624. $38 \frac{3}{5} \%=0.386$
615. $63 \frac{1}{4} \%=\underline{0.632}$
616. $88 \%=0.88$
619. $68 \frac{3}{4} \%=0.688$
622. $79 \frac{1}{2} \%=0.795$
621. $97 \frac{7}{10} \%=0.977$ $\square$ 623. $89 \frac{1}{2} \%=0.895$
617. $31 \frac{2}{5} \%=0.314$
620. $18 \frac{4}{5} \%=0.188$
618. $11 \frac{5}{10} \%=0.115$
$\qquad$

[^0]Convert each decimal to a percentage.
625. $0.248=24 \frac{4}{5} \%$
628. $0.825=82 \frac{1}{2} \%$
631. $0.33=33 \%$
634. $0.212=21 \frac{1}{5} \%$

Convert each percentage to a decimal and vice versa.
635. $19 \frac{1}{4} \%=0.192$
638. $15 \%=0.15$
641. $32 \frac{2}{5} \%=0.324$
644. $88 \frac{4}{5} \%=0.888$

Calculate the given percent of each value.
645. $10 \%$ of $308=\underline{30.8}$
646. $10 \%$ of $389=\underline{38.9}$
648. $10 \%$ of $2=\underline{0.2}$
651. $10 \%$ of $94=$ $\qquad$ 9.4
649. $10 \%$ of $133=\underline{13.3}$
652. $10 \%$ of $81=\underline{8.1}$
653. $10 \%$ of $391=\underline{39.1}$
647. $10 \%$ of $42=4.2$
650. $10 \%$ of $769=\underline{76.9}$
654. $10 \%$ of $33=$ $\qquad$ 3.3

Calculate the given percent of each value.
655. $90 \%$ of $711=\underline{639.9}$
658. $86 \%$ of $58=49.88$
659. $99 \%$ of $6=5.94$
662. $57 \%$ of $3=$ $\qquad$ 1.71 1.71
656. $73 \%$ of $2=1.46$
661. $14 \%$ of $2=$ 0.28
657. $50 \%$ of $2=$ $\qquad$ 660. $85 \%$ of $92=\underline{78.2}$ 663. $92 \%$ of $59=\underline{54.28}$
563.
664. $22 \%$ of $42=$ $\qquad$
$\qquad$
664. $22 \%$ of $42=\underline{9.24}$

Provide the conversions for each ratio.
665.

|  | Ratio | Fractio <br> $n$ | Percent | Decima <br> 1 |
| :---: | :---: | :---: | :---: | :---: |
| 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 <br> $n$ | Percent | Decima <br> 1 |
| :---: | :---: | :---: | :---: | :---: |
| 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.

| $\boldsymbol{+}$ | 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. 

| $\mathbf{+}$ | 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.

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

670. 

| $\div$ | 59 | 35 | 28 | 45 | 77 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | 7 | 4 | 3 | 5 | 9 |
| 8 | r3 | r3 | r4 | r5 | r5 |
| 7 | $\begin{aligned} & \hline 8 \\ & \text { r3 } \end{aligned}$ | 5 | 4 | ¢ 6 | 11 |
| 4 | $14$ | $\begin{aligned} & 8 \\ & \text { r3 } \end{aligned}$ | 7 | $11$ | 19 |
| 3 | $\begin{aligned} & 19 \\ & \text { r2 } \end{aligned}$ | $\begin{aligned} & \hline 11 \\ & \text { r2 } \end{aligned}$ | $\begin{gathered} \hline 9 \\ \mathrm{r} 1 \end{gathered}$ | 15 | 25 r2 |
| 2 | $29$ | $\begin{aligned} & 17 \\ & r 1 \end{aligned}$ | 14 | $\begin{aligned} & 22 \\ & \end{aligned}$ | $38$ |

## Complete the table.

671. | $\mathbf{x}$ | 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. 

| $\mathbf{x}$ | 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 | 11 | 4 |
| 9 | 7 | 4 | 6 | 8 | 1 |
| 7 | 9 | 6 | 8 | 10 | 3 |
| 8 | 8 | 5 | 7 | 9 | 2 |
674. 

| - | 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.

676.

677.

678.

681.

684.


Show the time for each clock.

688.

679.

682.

683.

680.

686.

689.

687.

690.

691.

692.

693.

694.


Show the time for each clock.

698.

701.

696.

699.

702.

697.

700.

703.

704.


Show the time for each clock.

708.

711.

706.

709.

712.

707.

710.

713.

714.


Show the time for each clock.
715.

718.

721.

724.


Show the time for each clock.
725.

728.

731.

726.

729.

732.

727.

730.

733.

734.


Convert the given measures of time to alternate measures of time.
$\qquad$ 736. $84 \mathrm{hr}=5,040 \mathrm{~min}$ 737. $36 \mathrm{hr}=2,160 \mathrm{~min}$
738. $83 \mathrm{~min}=$ $\qquad$ 739. 22 min $=$ $\qquad$ 740. $93 \mathrm{hr}=5,580 \mathrm{~min}$
741. $62 \mathrm{~min}=$ 3,720 sec
742. $77 \mathrm{hr}=$ 4,620 min 743. $62 \mathrm{hr}=$ 3,720 min
744. $29 \mathrm{hr}=$ $\qquad$ $1,740 \mathrm{~min}$

Draw the clock hands to show the passage of time.
745.


What time will it be in 4 hours 11 minutes?
747.


What time will it be in 3 hours 19 minutes?
749.


What time will it be in 1 hour 42 minutes?
751.


What time will it be in 1 hour 31 minutes?
746.


What time will it be in 2 hours 17 minutes?
748.


What time will it be in 4 hours 26 minutes?

750


What time will it be in 1 hour 1 minute?
752.

753.


What time will it be in 3 hours 43 minutes?
754.


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?
757.


What time was it 5 hours 3 minutes ago?
759.


What time was it 1 hour 35 minutes ago?
756.


What time was it 2 hours 26 minutes ago?
758.


What time was it 5 hours 46 minutes ago?
760.

761.


What time was it 4 hours 15 minutes ago?
763.


What time was it 2 hours 19 minutes ago?
762.

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?
767.


What time was it 2 hours 48 minutes ago?
766.

768.

769.


What time was it 2 hours 26 minutes ago?
771.


What time will it be in 4 hours 13 minutes?
773.

770.

772.


What time was it 4 hours 10 minutes ago?

774

775. In the space below sketch a map from school to your home. It does not 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?
$1 / 2$ or $50 \%$ or 0.5
778. What is the probability (chance) of rolling a die and it showing a 5 ?

$$
1 / 6 \text { ot } 17 \% \text { ot } 0.17
$$

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

## $4 / 9$ or $44 \%$ ot 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 $1.9 \%$ ot 0.019
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

782. The walls of a room are to be painted with two coats of paint. The area of the walls is $25 \mathrm{~m}^{2}$. Correct application of the paint requires 100 mL of paint per square metre. Calculate how many litres of paint will be required.

5 ltres
$\qquad$
$\qquad$
$\qquad$
783. A front lawn has an area of $225 \mathrm{~m}^{2}$. A pesticide to remove weeds is sprayed onto the lawn at a rate of 50 mL per square metre. How much pesticide is required to complete the task?
1.25 ltrees
$\qquad$
$\qquad$
$\qquad$
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 50 g 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 metres
$\qquad$
$\qquad$
$\qquad$
785. Draw the named shapes in the boxes below.

| Equilateral <br> Triangle | Isosceles <br> Triangle | Right <br> Triangle | Scalene <br> Triangle |
| :---: | :---: | :---: | :---: |

786. Draw the named shapes in the boxes below.

| Square | Rectangle | Circle | Semi-Circle |
| :---: | :---: | :---: | :---: |
| $\square$ |  |  |  |

787. Draw the named shapes in the boxes below.

| Pentagon | Hexagon | Octagon | Trapezium |
| :--- | :--- | :--- | :--- |

788. Name the solids shown below.

A) sphere
B) cyfinder
C) rectangular prisun
D) cone
E) hexagonal prism
F) square pyramid
G) triangular pyramid
H) cube
I) triangular prism
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 | 500 g | 250 g | 3759 | 6259 | 750g |
| Minced Meat (beef or chicken) | 400g | 200g | 300g | 500g | 6009 |
| Pasta Sauce | 350 mL | 175mL | 263 ml | 438 ml | 525 ml |
| Parmesan Cheese | 150 g | 759 | 1139 | 1889 | 2259 |
| Olive Oil | 2 tbsp* | 1tbis | 1.5trap | 2.56 tap | 3thpou |

* 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

| TOOWONG |  |
| :---: | :---: |
| PARKING RATES |  |
| time | RATE |
| O-2.0 hrs | FREE |
| $2.0-2.5 \mathrm{hrs}$ | \$ 2.00 |
| $2.5-3.0 \mathrm{hrs}$ | \$ 3.00 |
| $3.0-3.5 \mathrm{hrs}$ | \$ 4.00 |
| $3.5-4.0 \mathrm{hrs}$ | \$ 6.00 |
| $4.0-4.5 \mathrm{hrs}$ | \$ 10.00 |
| $4.5-5.0 \mathrm{hrs}$ | \$ 15.00 |
| $5.0-5.5 \mathrm{hrs}$ | \$ 20.00 |
| $5.5-6.0 \mathrm{hrs}$ | \$ 25.00 |
| $6.0-6.5 \mathrm{hrs}$ | \$ 35.00 |
| $6.5-7.0 \mathrm{hrs}$ | \$40.00 |
| 7 + hrs | \$49.00 |
| Midnight - 7am | \$20.00 |
| Staff (parked in allocated staff parking area) | $\begin{aligned} & \$ 4.00 \\ & \text { per day } \end{aligned}$ |

## 2 HOURS FREE PARKING

FREE PARKING WITH ENTRY AFTER 6PM
questions shown to the right of the sign.
a) What is the cost of parking for 3 hours?
$\$ 3.00$
b) How much does a staff member pay for 7 hours of parking?
$\$ 4.00$
c) A person parks from 8pm until 7am and pays by credit card. What is the total cost?
$\$ 26.52$
Hut:
$\{\$ 6.00+\$ 20.00+2 \%$ or $102 \%$ of $\$ 26.00\}$
791. Below is a map of Southern Florida. Use the map to answer the questions.

a) What is the name of the northernmost city?

## Sauford

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.
$173 \mathrm{~km}(+/-5 \mathrm{~km}), 108 \mathrm{mmles}(+/-3 \mathrm{miles})$
792. Below is a detailed map of Miami Beach. Use the map to answer the questions.

a) In what direction does 11 th street run?

Eat-Wat
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 Theeter
d) Using the scale, how far is the Kenmore Hotel from the Cardozo Hotel?
$430 m+/-5 m$


[^0]:    

