

Level 4 Review - Summer packet

<p>1. 1 Day = 24 Hours</p> <p>13 days 12 hours + 9 days 17 hours</p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="border-right: 1px solid black; padding: 5px;">days</td> <td style="padding: 5px;">Hours</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px; text-align: center;">13</td> <td style="padding: 5px; text-align: center;">12</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px; text-align: center;">+ 9</td> <td style="padding: 5px; text-align: center;">17</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px; text-align: center;">22 days</td> <td style="padding: 5px; text-align: center;">29 Hours</td> </tr> </table> <div style="border: 1px solid black; padding: 5px; margin-top: 5px; display: flex; justify-content: space-around;"> 23 days 5 Hours </div>	days	Hours	13	12	+ 9	17	22 days	29 Hours	<p>1 Gallon = 8 pints</p> <p>13 gallons 15 pints - 5 gallons 2 pints</p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="border-right: 1px solid black; padding: 5px;">Gallons</td> <td style="padding: 5px;">Pints</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px; text-align: center;">13</td> <td style="padding: 5px; text-align: center;">15</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px; text-align: center;">- 5</td> <td style="padding: 5px; text-align: center;">2</td> </tr> </table> <div style="border: 1px solid black; padding: 5px; margin-top: 5px; display: flex; justify-content: space-around;"> 8 gallons 13 pints </div> <div style="border: 1px solid black; padding: 5px; margin-top: 5px; display: flex; justify-content: space-around;"> 9 gallons 5 pints </div>	Gallons	Pints	13	15	- 5	2								
days	Hours																						
13	12																						
+ 9	17																						
22 days	29 Hours																						
Gallons	Pints																						
13	15																						
- 5	2																						
<p>2. Length = 7 cm</p> <p>Width = 5 cm</p> <div style="border: 1px solid black; width: 60px; height: 60px; margin-left: auto; margin-right: auto;"></div> <p>$P = 2(7+5)$ $= 2(12)$</p> <p>Perimeter = <u>24 cm</u></p> <p>$A = 7 \times 5$</p> <p>Area = <u>35 sq cm</u></p>	<p>Length = 5.16 cm</p> <p>Width = 4 cm</p> <div style="border: 1px solid black; width: 60px; height: 60px; margin-left: auto; margin-right: auto;"></div> <p>$P = (5.16+4) \times 2$ $= 9.16 \times 2$</p> <p>Perimeter = <u>18.32 cm</u></p> <p>$A = 5.16 \times 4$</p> <p>Area = <u>20.64 sq cm</u></p>																						
<p>3.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td style="padding: 5px;">300 + 1100</td> <td style="text-align: center; padding: 5px;">1400</td> </tr> <tr> <td style="padding: 5px;">100 + 6023</td> <td style="text-align: center; padding: 5px;">6,123</td> </tr> <tr> <td style="padding: 5px;">9000 - 212</td> <td style="text-align: center; padding: 5px;">8,788</td> </tr> <tr> <td style="padding: 5px;">6000 - 550</td> <td style="text-align: center; padding: 5px;">5,450</td> </tr> <tr> <td style="padding: 5px;">4000 - 1150</td> <td style="text-align: center; padding: 5px;">2,850</td> </tr> </table>	300 + 1100	1400	100 + 6023	6,123	9000 - 212	8,788	6000 - 550	5,450	4000 - 1150	2,850	<table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td style="padding: 5px;">132.98 ÷ 100</td> <td style="text-align: center; padding: 5px;">1.3298</td> </tr> <tr> <td style="padding: 5px;">132.98 * 100</td> <td style="text-align: center; padding: 5px;">13,298</td> </tr> <tr> <td style="padding: 5px;">132.98 ÷ 10</td> <td style="text-align: center; padding: 5px;">13.298</td> </tr> <tr> <td style="padding: 5px;">132.98 * 10</td> <td style="text-align: center; padding: 5px;">1329.8</td> </tr> <tr> <td style="padding: 5px;">32.98 ÷ 100</td> <td style="text-align: center; padding: 5px;">0.3298</td> </tr> <tr> <td style="padding: 5px;">32.98 * 100</td> <td style="text-align: center; padding: 5px;">3,298</td> </tr> </table>	132.98 ÷ 100	1.3298	132.98 * 100	13,298	132.98 ÷ 10	13.298	132.98 * 10	1329.8	32.98 ÷ 100	0.3298	32.98 * 100	3,298
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4 Review / Pg ①

4

Solve (Add/ subtract / multiply)

(a)	(b)	(c)
$43.99 + 13.8$	$65.02 * 9$	$87.05 * 8$
$\begin{array}{r} 43.99 \\ + 13.80 \\ \hline 57.79 \end{array}$	$\begin{array}{r} 65.02 \\ \times 9 \\ \hline 585.18 \end{array}$	$\begin{array}{r} 87.05 \\ \times 8 \\ \hline 696.40 \end{array}$
57.79	585.18	696.40
(d)	(e)	(f)
$20 - 11.5$	$33.109 - 25.13$	$45.34 - 14.61$
$\begin{array}{r} 19.10 \\ - 11.5 \\ \hline 8.5 \end{array}$	$\begin{array}{r} 2121010 \\ 33.109 \\ - 25.130 \\ \hline 7.979 \end{array}$	$\begin{array}{r} 45.34 \\ - 14.61 \\ \hline 30.73 \end{array}$
8.5	7.979	

5

Compare ($>$ $<$ $=$)

- a) 0.03 $<$ 3.0
- b) 254.0 $>$ 0.255
- c) 610.1 $>$ 6.101
- d) 3.167 $<$ 316.7

131 ladies are going for shopping. A taxi can carry 5 ladies. How many taxis do they need?

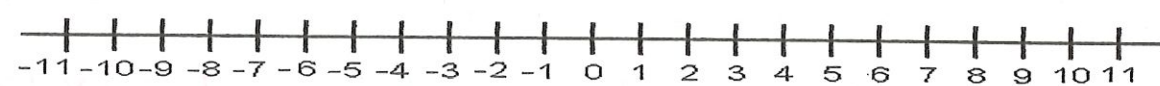
$$\begin{array}{r} 26 \\ 5 \overline{)131} \\ \underline{10} \\ 31 \\ \underline{30} \\ 1 \end{array}$$

$$26 + 1$$

27 Taxies

Level 4/Review Pg ②

<p>6</p>	<p>Sara has \$100. She spends \$57.80 on groceries and \$6.90 on taxes. How much money is left with her after she is done with her groceries?</p> $ \begin{array}{r} \$ 57.80 \\ \$ 6.90 \\ \hline \$ 64.70 \end{array} $ $ \begin{array}{r} \$ 100.00 \\ - \$ 64.70 \\ \hline \end{array} $ <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>\$ 35.30</p> </div>	<p>On Sunday, $\frac{1}{5}$ of a mall's shops were closed. 12 shops showed open at mall. How many shops does the mall have?</p> <div style="border: 1px solid red; padding: 2px; display: inline-block;"> Open Open Open Open Closed </div> <p>o = open 12 shops were open c = closed</p> $4 \overline{)12} = 3$ <p>Each part = 3</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>Total Shops = 15 shops</p> </div>								
<p>7</p>	<p>Paul bought 3 cheap and 2 expensive mobile phones. The cheap mobile phone cost \$ 11.00 each and an expensive mobile phone was three times the cost of the cheap one. What was his total cost?</p> <p>Cheap phones cost = \$ 11 x 3 = \$ 33</p> <p>Expensive phones cost = \$ 33 x 2 = \$ 66</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>Total Cost = \$ 99</p> </div>	<p>Write roman numerals for</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">213</td> <td style="padding: 5px; text-align: center;">CCXIII</td> </tr> <tr> <td style="padding: 5px;">89</td> <td style="padding: 5px; text-align: center;">LXXXIX</td> </tr> <tr> <td style="padding: 5px;">39</td> <td style="padding: 5px; text-align: center;">XXXIX</td> </tr> <tr> <td style="padding: 5px;">49</td> <td style="padding: 5px; text-align: center;">XLIX</td> </tr> </table>	213	CCXIII	89	LXXXIX	39	XXXIX	49	XLIX
213	CCXIII									
89	LXXXIX									
39	XXXIX									
49	XLIX									
<p>8</p>	<p>Circle the smallest fraction</p> <p>a) <table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="padding: 10px;">$\frac{3}{5}$</td> <td style="padding: 10px;">$\frac{7}{5}$</td> <td style="padding: 10px;">$\frac{1}{5}$</td> </tr> </table></p> <p>b) <table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="padding: 10px;">$\frac{6}{5}$</td> <td style="padding: 10px;">$\frac{6}{2}$</td> <td style="padding: 10px;">$\frac{6}{10}$</td> </tr> </table></p>	$\frac{3}{5}$	$\frac{7}{5}$	$\frac{1}{5}$	$\frac{6}{5}$	$\frac{6}{2}$	$\frac{6}{10}$	<p>How many triangles are there in the figure</p> <div style="text-align: center;"> </div> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>10 Triangles</p> </div>		
$\frac{3}{5}$	$\frac{7}{5}$	$\frac{1}{5}$								
$\frac{6}{5}$	$\frac{6}{2}$	$\frac{6}{10}$								

9	Write in expanded form as fractions			
a)	34.098 $30 + 4 + \frac{0}{10} + \frac{9}{100} + \frac{8}{1000}$			
b)	6.023 $6 + \frac{0}{10} + \frac{2}{100} + \frac{3}{1000}$			
10	Solve using a number line			
	a)	b)	c)	d)
	$-2 - 3 = -5$	$-5 + 7 = 2$	$-8 + 7 = -1$	$-7 + 2 = -5$
				
11	a)	b)	c)	
	$\begin{array}{r} 346 \\ * 0.03 \\ \hline \end{array}$	$\begin{array}{r} 245 \\ * 0.04 \\ \hline \end{array}$	$\begin{array}{r} 108 \\ * 0.05 \\ \hline \end{array}$	
	10.38	9.80	5.40	
12	Write the corresponding numerals			
a)	nine million, five hundred five thousand, nine hundred thirty		$9,505,930$	
b)	seven hundred nine thousand, four hundred two,		$709,402$	

13	<u>Arrange the decimals in ascending order</u>							
a)	0.12	2.9	0.60	17	0.04	3.078		
	0.04	0.12	0.60	2.9	3.078	17		
b)	5.06	6.05	56	0.056	65.0	5.6		
	0.056	5.06	5.60	6.05	56	65		
14	<u>Complete the sequence</u>							
	Rule: Tens & units place switch							
a)	12	21	34	43	61	16	98	89
	Rule = + 10							
b)	106	116	126	136	146	156	166	176
15	<u>Express the following as Fractions</u>				(c)	(d)		
	(a)	(b)						
	13.89	7.77		7.07		7.007		
	$13 \frac{89}{100}$	$7 \frac{77}{100}$		$7 \frac{7}{100}$		$7 \frac{7}{1000}$		
16	<u>Express the following as decimals</u>				(c)	(d)		
	(a)	(b)						
	$\frac{3875}{10}$	$\frac{3875}{100}$		$\frac{3875}{10}$		$\frac{3875}{100}$		
	387.5	38.75		38.75		3.875		

17

Divide up to 2 decimal places

$$\begin{array}{r}
 10.23 \\
 \hline
 4 \overline{) 40.92} \\
 \underline{-40} \\
 00 \\
 \underline{-00} \\
 09 \\
 \underline{-8} \\
 12 \\
 \underline{-12} \\
 0
 \end{array}$$

$$Q = 10.23$$

Divide up to 2 decimal places

$$\begin{array}{r}
 7.58 \\
 \hline
 3 \overline{) 22.74} \\
 \underline{-21} \\
 17 \\
 \underline{-15} \\
 24 \\
 \underline{-24} \\
 0
 \end{array}$$

$$Q = 7.58$$

18

An empty 3 liter can is filled with 1 liters 250 milliliters of cold water and 700 milliliters of warm water. How much space is left in the can?

Hint : 1 liter = 1000 ml

	lit	ml
cold	1	250 ml
warm		700 ml
Total	1 lit	950 ml

$$1 \text{ liter } 50 \text{ ml}$$

$$\begin{aligned}
 &1 \text{ liter} = 1000 \text{ ml} \\
 &3 \text{ liter} - (1 \text{ liter } 950 \text{ ml}) \\
 &= 1 \text{ liter } 50 \text{ ml}
 \end{aligned}$$

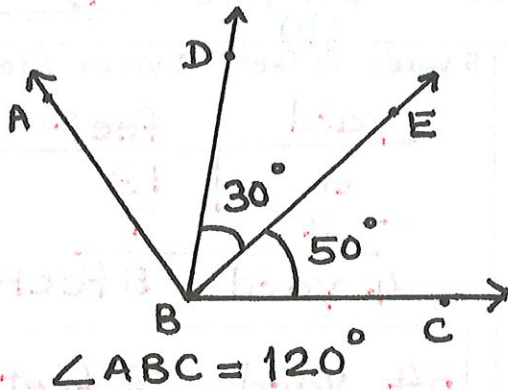
What is the sum of 45,980 and 27,101?

$$\begin{array}{r}
 45,980 \\
 + 27,101 \\
 \hline
 73,081
 \end{array}$$

$$73,081$$

Pg 6

19



$$\angle ABD = 40^\circ$$

A television program had an advertisement for 4 minutes 33 seconds. How long was the advertisement for in seconds?

$$\begin{aligned} &4 \text{ min } 33 \text{ Seconds} \\ &= (4 \times 60 + 33) \text{ Seconds} \\ &= 240 + 33 \end{aligned}$$

273 Seconds

20

Of the following numbers in which number does the digit 3 have the smallest place value

	Place value
• 3547	3000
• 95732	30
• 103795	3000
• 5473	3

5473

If 50,005 is divided by 10, what will be the quotient?

$$\begin{array}{r} 5000 \\ 10 \overline{) 50005} \\ \underline{50} \\ 0005 \\ \underline{-0} \\ 5 \end{array}$$

5,000

21

The sum of the ages of Rohan, Ravi and Raj Kumar is 35 years. If Rohan is 13 years old and Raj Kumar is 4 years younger than Rohan, how old is Ravi?

Rohan	Raj	Ravi
13	13-4	
= 13	= 9	
13 + 9 + \square = 35		
22 + \square = 35		

Ravi
13 years old

How many quarters can be exchanged for a total amount of \$ 3.75?

$$\begin{aligned} \$ 3 &= 12 \text{ quarters} \\ 75 \text{¢} &= 3 \text{ quarters} \\ \hline &15 \text{ quarters} \end{aligned}$$

15 quarters .

22

Hint : one foot = 12 inchesone yard = 3 feet

(a)

(b)

7 feet 20 inches - 2 feet 2 inches

feet	Inches
7	20
- 2	2
5 feet	18 inches

6 feet 6 inches

6 yards 13 feet - 2 yards 7 feet

yard	feet
6	13
- 2	7
4 yard	6 feet

6 yards

23

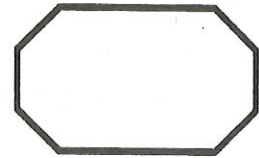
Name the following shapes



Ray



Pentagon



Octagon



Rectangular Prism

Isosceles Δ 

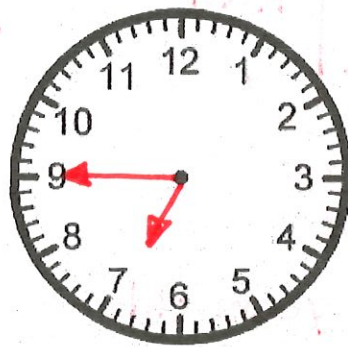
Rhombus

24

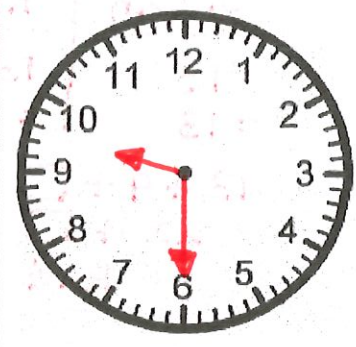
Mark the times on the clock



4:35 pm



Quarter to 7

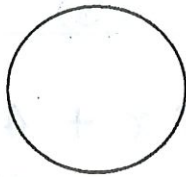


half past 9

Pg 8

25 find the unknown

Diameter =
2 x Radius



Radius	Diameter
a) 5.6 cm	11.2 cm
b) 3.54 cm	7.08 cm
c) 13.4 cm	26.8 cm

a) $\frac{8}{7} + \frac{2}{7} =$

$\frac{10}{7}$

b) $\frac{7}{14} + \frac{2}{14} - \frac{3}{14} =$

$\frac{6}{14}$

c) $\frac{16}{15} + \frac{11}{15} - \frac{7}{15} =$

$\frac{20}{15}$

26 If 2024 was a leap year, which year will be the 4th leap year from 2024?

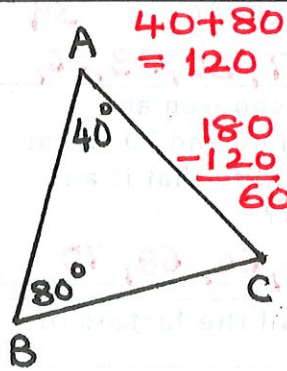
Every 4 years is a leap year

1st → 2028

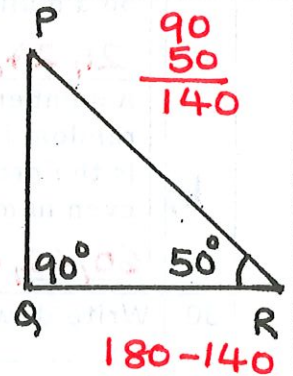
2nd → 2032

3rd → 2036

4th → 2040



$\angle C = 60^\circ$



$\angle P = 40^\circ$

27 $4 + (3 \times 9) \div 3 - 0$

Using PEMDAS

$4 + 27 \div 3 - 0$

$= 4 + 9 - 0$

$= 13 - 0$



13

What is the sum of smallest and the largest number formed by the digits 0, 8, 5, 3 using all the digits only once

Largest = 8530

Smallest = 358

Sum $\frac{8530}{+ 358}$

8,888

28

(a)

(b)

(c)

$$\begin{aligned} &7x + 9y \\ + &10x - 8y \end{aligned}$$

$$17x + 1y$$

$$\begin{aligned} &17x + 40y \\ + &3x - 18y \end{aligned}$$

$$20x + 22y$$

$$\begin{aligned} &13a + 12b \\ + &5a - 6b \end{aligned}$$

$$18a + 6b$$

29

a)

A number is chosen at random from 20 and 40. What is the probability that it will be a multiple of 3?
39
21, 24, 27, 30, 33, 36,

$$\frac{7}{21}$$

A number is chosen at random from 0 to 20. What is the probability that it will be a multiple of 4?
4, 8, 12, 16, 20

$$\frac{5}{21}$$

b)

A number is chosen at random from 60 and 70. What is the probability that it is an even number?
60, 62, 64, 66, 68, 70

$$\frac{6}{11}$$

A number is chosen at random from 1 to 10. What is the probability that it will be a factor of 20?
1, 2, 4, 5, 10

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

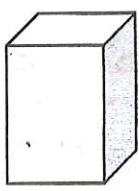
30

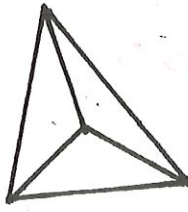
Write down all the factors of

60						100					
1	2	3	4	5	6	1	2	4	5	10	
60	30	20	15	12	10	100	50	25	20		

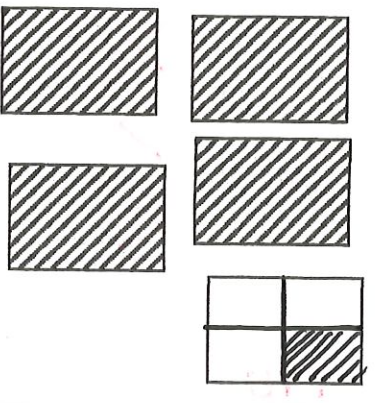
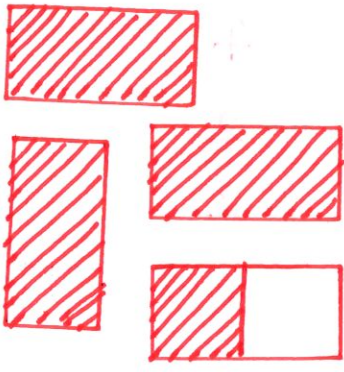
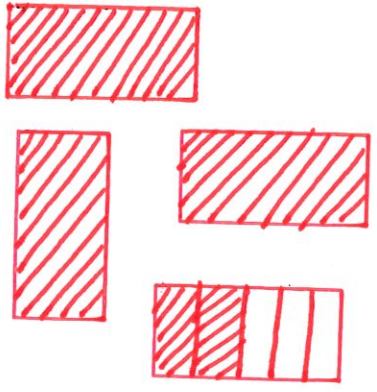
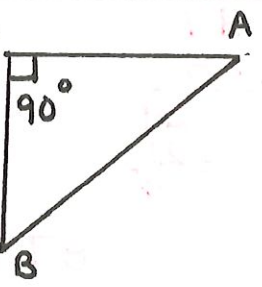
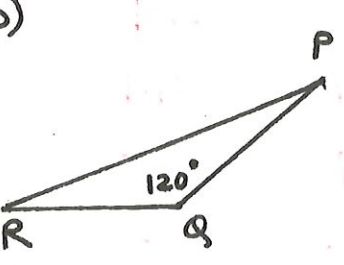
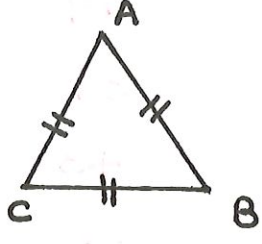
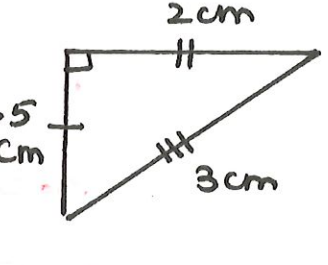
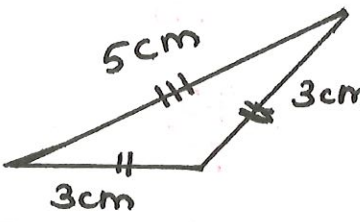
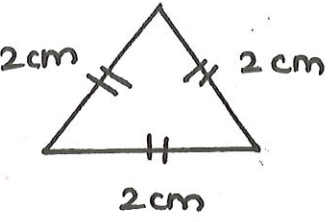
31

How many

	Edges	12
	Vertices	8
	faces	6

	Edges	6
	Vertices	4
	faces	4

32	How many	Fill < > =																				
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Shape</th> <th style="width: 50%;">Number of axis of symmetry</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Square</td> <td style="text-align: center; color: red;">4</td> </tr> <tr> <td style="text-align: center;">Rhombus</td> <td style="text-align: center; color: red;">2</td> </tr> <tr> <td style="text-align: center;">Oval</td> <td style="text-align: center; color: red;">2</td> </tr> </tbody> </table>	Shape	Number of axis of symmetry	Square	4	Rhombus	2	Oval	2	<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 33%;">2.42</td> <td style="width: 33%; text-align: center; color: red;"><</td> <td style="width: 33%;">2.48</td> </tr> <tr> <td>11.08</td> <td style="text-align: center; color: red;">></td> <td>1.008</td> </tr> <tr> <td>6</td> <td style="text-align: center; color: red;">></td> <td>4.90</td> </tr> <tr> <td>12.89</td> <td style="text-align: center; color: red;"><</td> <td>15.9</td> </tr> </tbody> </table>	2.42	<	2.48	11.08	>	1.008	6	>	4.90	12.89	<	15.9
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2.42	<	2.48																				
11.08	>	1.008																				
6	>	4.90																				
12.89	<	15.9																				
33	Write down all the prime numbers between 10 and 50	What is the largest counting number less than 879 divisible by 5?																				
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr><td style="text-align: center; color: red;">11</td><td style="text-align: center; color: red;">13</td><td style="text-align: center; color: red;">17</td></tr> <tr><td style="text-align: center; color: red;">19</td><td style="text-align: center; color: red;">23</td><td style="text-align: center; color: red;">29</td></tr> <tr><td style="text-align: center; color: red;">31</td><td style="text-align: center; color: red;">37</td><td style="text-align: center; color: red;">41</td></tr> <tr><td style="text-align: center; color: red;">43</td><td style="text-align: center; color: red;">47</td><td style="text-align: center; color: red;">-</td></tr> <tr><td style="text-align: center; color: red;">-</td><td style="text-align: center; color: red;">-</td><td style="text-align: center; color: red;">-</td></tr> </tbody> </table>	11	13	17	19	23	29	31	37	41	43	47	-	-	-	-	<p style="color: red;"> $\begin{array}{r} 175 \\ 5 \overline{)879} \\ \underline{-5} \\ 37 \\ \underline{-35} \\ 29 \\ \underline{-25} \\ 4 \end{array}$ </p> <p style="text-align: right; color: red;"> $\begin{array}{r} 879 \\ \underline{-4} \\ 875 \end{array}$ </p> <div style="border: 1px solid black; width: fit-content; margin: 10px auto; padding: 5px; color: red; font-weight: bold;">875</div>					
11	13	17																				
19	23	29																				
31	37	41																				
43	47	-																				
-	-	-																				
34	Write two equivalent fractions for (Answer will vary)	Convert into grams(g)																				
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 33%; text-align: center;">a) $\frac{3}{4}$</td> <td style="width: 33%; text-align: center; color: red;">$\frac{30}{40}$</td> <td style="width: 33%; text-align: center; color: red;">$\frac{6}{8}$</td> </tr> <tr> <td style="text-align: center;">b) $\frac{1}{5}$</td> <td style="text-align: center; color: red;">$\frac{2}{10}$</td> <td style="text-align: center; color: red;">$\frac{3}{15}$</td> </tr> <tr> <td style="text-align: center;">c) $\frac{4}{7}$</td> <td style="text-align: center; color: red;">$\frac{8}{14}$</td> <td style="text-align: center; color: red;">$\frac{40}{70}$</td> </tr> <tr> <td style="text-align: center;">d) $\frac{3}{11}$</td> <td style="text-align: center; color: red;">$\frac{6}{22}$</td> <td style="text-align: center; color: red;">$\frac{9}{33}$</td> </tr> </tbody> </table>	a) $\frac{3}{4}$	$\frac{30}{40}$	$\frac{6}{8}$	b) $\frac{1}{5}$	$\frac{2}{10}$	$\frac{3}{15}$	c) $\frac{4}{7}$	$\frac{8}{14}$	$\frac{40}{70}$	d) $\frac{3}{11}$	$\frac{6}{22}$	$\frac{9}{33}$	<p>1000 milligrams = <u>1</u> grams</p> <p>4000 milligrams = <u>4</u> grams</p> <p>7000 milligrams = <u>7</u> grams</p> <p>3500 milligrams = <u>3.5</u> grams</p> <p>6500 milligrams = <u>6.5</u> grams</p>								
a) $\frac{3}{4}$	$\frac{30}{40}$	$\frac{6}{8}$																				
b) $\frac{1}{5}$	$\frac{2}{10}$	$\frac{3}{15}$																				
c) $\frac{4}{7}$	$\frac{8}{14}$	$\frac{40}{70}$																				
d) $\frac{3}{11}$	$\frac{6}{22}$	$\frac{9}{33}$																				

35	Represent the following fractions as pictures		
	(a) $\frac{1}{4}$	(b) $3\frac{1}{2}$	(c) $3\frac{2}{5}$
			
36	Classify as acute, Obtuse or right angled triangles		
	<p>a)</p> 	<p>b)</p> 	<p>c)</p> 
	Right angled Δ	Obtuse angled Δ	Acute angled Δ
37	Classify as scalene, obtuse or isosceles triangles		
			
	Scalene Δ	Isosceles Δ	Equilateral Δ

38 Find Mode, Range and Median

a) 95, 85, 95, 95, 85, 95, 86, 86, 95
Ascending Order
 85, 85, 86, 86, 95, 95, 95, 95
 Range = $95 - 85 = 10$

b) 20, 21, 18, 16, 19, 20, 17, 20, 20
 16, 17, 18, 19, 20, 20, 20, 21
 Range = $21 - 16 = 5$
 Median = 20
 Mode = 20

Range = 10
 Median = 95
 Mode = 95

Range = 5
 Median = 20
 Mode = 20

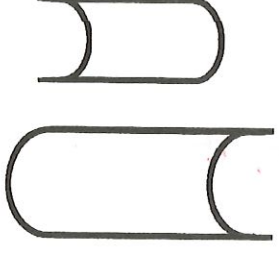

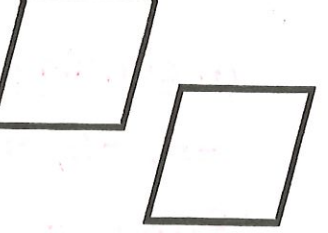
39 Draw stem and leaf graph for

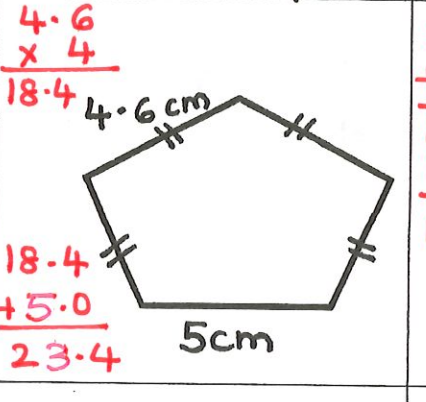
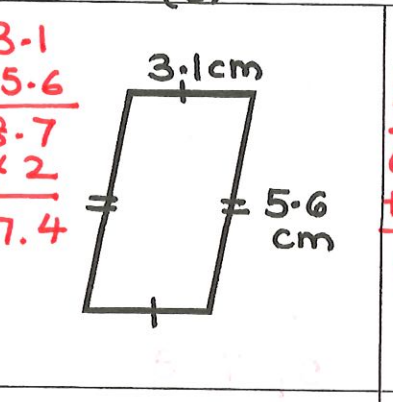
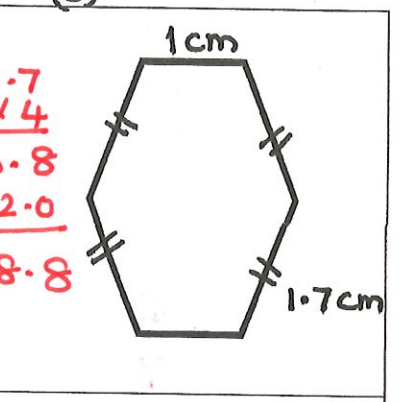
83	83	98	78	77	99	83	63	80
92	90	80	80	96	85	86	70	87

Stem	Leaf
6	3
7	0, 7, 8
8	0, 0, 0, 3, 3, 3, 5, 6, 7
9	0, 2, 6, 8, 9

40 Express as a decimal


(a)	(b)	(c)
430%	5%	14%
$= \frac{430}{100}$	$= \frac{5}{100}$	$= \frac{14}{100}$
$= 4.30$	0.05	0.14

41	State if congruent / similar		
<p style="text-align: center;">(a)</p> 	<p style="text-align: center;">(b)</p> 	<p style="text-align: center;">(c)</p> 	
Congruent - Yes / No	Congruent - Yes / No	Congruent - Yes / No	
Similar - Yes / No	Similar - Yes / No	Similar - Yes / No	

42	Find the perimeter		
<p style="text-align: center;">(a)</p> 	<p style="text-align: center;">(b)</p> 	<p style="text-align: center;">(c)</p> 	
23.4 cm	17.4 cm	8.8 cm	

43	Order of operations Use PEMDAS	
$35 + (45 \div 9) - (6 \times 2)$ $= 35 + 5 - 12$ $= 40 - 12$	$(9 - 2) + 3 \times 6 - 8 \div 2$ $= 7 + 18 - 4$ $= 25 - 4$	
28	21	

<p>44</p>	<p>I have 3 notes of \$20 each, 6 notes of \$ 5 each and 5 notes of \$ 1 each. How many dollars do I have in all?</p> $3 \times \$20 = \60 $6 \times \$5 = \30 $5 \times \$1 = \5 <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;">\$ 95</div>	<p>Round off to the hundred's place</p> $2,345,428 \approx 2,345,400$ $3,980,419 \approx 3,980,400$ $145,083 \approx 145,100$									
<p>45</p>	<p>The wool from one sheep can be used to make $2\frac{1}{2}$ coats. How many coats can be made from the wool from 6 sheep?</p> <table style="border-collapse: collapse; margin-left: 20px;"> <thead> <tr> <th style="border-right: 1px solid black; padding: 5px;">Sheep</th> <th style="padding: 5px;">Coats</th> <th style="padding: 5px;"></th> </tr> </thead> <tbody> <tr> <td style="border-right: 1px solid black; padding: 5px;">1</td> <td style="padding: 5px;">$2\frac{1}{2}$</td> <td style="padding: 5px;">$6 \times 2\frac{1}{2}$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">6</td> <td style="padding: 5px;">x</td> <td style="padding: 5px;">$= 6 \times 2.5$</td> </tr> </tbody> </table> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;">15 coats</div>	Sheep	Coats		1	$2\frac{1}{2}$	$6 \times 2\frac{1}{2}$	6	x	$= 6 \times 2.5$	<p>What time is 5 hour 45 minutes after 3:30 pm?</p> $3:30 \text{ pm}$ $+ \quad \underline{5 \text{ Hours}}$ $8:30 \text{ pm}$ $+ \quad 45 \text{ minutes}$ $= 9:15 \text{ pm}$ <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;">9:15 pm</div>
Sheep	Coats										
1	$2\frac{1}{2}$	$6 \times 2\frac{1}{2}$									
6	x	$= 6 \times 2.5$									
<p>46</p>	<p>What do I get if I multiply 7 by 12 and then divide the result by 2</p> $(7 \times 12) = 84$ $84 \div 2 = 42$ <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;">42</div>	<p>If there are one farmer, 8 chicken and 5 cows on a field. How many feet are there in all on the field?</p> $1 \text{ farmer} = 2 \text{ feet}$ $8 \text{ chicken} = 16 \text{ feet}$ $5 \text{ cows} = 20 \text{ feet}$ $\text{Total} =$ <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;">38 feet</div>									

<p>47</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">Challenge Question</p>	$(3 \times 333) + (3 \times 333) =$ $3 \times (?)$ $= 3 \times (333 + 333)$ $= 3 \times 666$ <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">666</div>	$2+3+4+5+6 =$ $2 \times 3 \times 4 \times 5 \times 6 \div \boxed{?}$ $(2+3+4+5+6) = 20$ $2 \times 3 \times 4 \times 5 \times 6 = 20 \times 36$ <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">? = 36</div>
<p>48</p>	<p>What is the sum of the digits in the number: Thirty thousand five hundred two</p> $30,502$ <p>Sum (digits)</p> $= 3+0+5+0+2$ <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">10</div>	<p>What number is 20 less than the sum of 950 and 880?</p> $\begin{array}{r} 950 \\ + 880 \\ \hline 1830 \\ - 20 \\ \hline \end{array}$ <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">1,810</div>
<p>49</p>	<p>12 tens + 16 ones = 1 hundred + how many ones?</p> $12 \text{ Tens} = 120$ $16 \text{ Ones} = \frac{16}{1}$ <p>Sum</p> 136 $= 100 + 36$ <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">36 Ones</div>	$101 \times 10 \times 1 \times 0 \times 1 \times 10 \times 101 =$ $1010 \times \boxed{?}$ $(\text{Any number}) \times 0 = 0$ <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">? = 0</div>
<p>50</p>	<p>Alltogether 7 pentagons have how many sides?</p> <p>Pentagon has 5 sides</p> $7 \text{ pentagons} = 7 \times 5$ <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">35 sides.</div>	<p>Alltogether 3 rectangles have how many diagonals?</p>  <p>Every Rectangle has 2 diagonals</p> $3 \text{ Rectangles} = 3 \times 2$ <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">6 diagonals</div>

51

a)	$789.563 \div 100$	7.89563
b)	$789.563 * 100$	78,956.3
c)	$789.563 \div 10$	78.9563
d)	$789.563 * 10$	7895.63
e)	$789.563 \div 1000$	0.789563
f)	$789.563 * 1000$	789,563

52

Draw stem and leaf graph for

43	52	61	40	52	61	66	53	50
40	45	52	66	67	53	52	40	43

Stem	Leaf
4	0, 0, 0, 3, 3, 5
5	0, 2, 2, 2, 2, 3, 3
6	1, 1, 6, 6, 7

53

Find Mode, Range and Median

35	43	43	52	35	62
61	30	35	42	50	

Ascending Order

30, 35, 35, 35

42, 43, 43,

50, 52

61, 62

Median = 43

Range

= 62 - 30

Range = 32

Median = 43

Mode = 35

Pg (17)

54	Express as a decimal		
	389%	73 %	9%
	3.89	0.73	0.09
	5000%	35%	143%
	50	0.35	1.43

55	Divide up to <u>2 decimal places</u>	Divide up to <u>2 decimal places</u>
	$\begin{array}{r} 4.26 \\ 5 \overline{) 21.30} \\ \underline{-20} \\ 13 \\ \underline{-10} \\ 30 \\ \underline{-30} \\ 0 \end{array}$	$\begin{array}{r} 5.89 \\ 9 \overline{) 53.01} \\ \underline{-45} \\ 80 \\ \underline{-72} \\ 81 \\ \underline{-81} \\ 0 \end{array}$
	Q= 4.26	Q= 5.89

56	Find the sum of the following numbers		
	35.12 + 4.52	5.2 - 3.72	5.45 + 13.9
	$\begin{array}{r} 35.12 \\ + 4.52 \\ \hline 39.64 \end{array}$	$\begin{array}{r} 4 \\ 5.20 \\ - 3.72 \\ \hline 1.48 \end{array}$	$\begin{array}{r} 1 \\ 5.45 \\ + 13.90 \\ \hline 19.35 \end{array}$
	39.64	1.48	19.35

57

Round off to the hundred's place

Given number	Rounded off
39,198	39,200
40,899	40,900
6,407	6,400
5,550	5,600

Circle the largest fraction

$\frac{13}{9}$	$\frac{7}{9}$	$\frac{18}{9}$
----------------	---------------	----------------

$\frac{4}{11}$	$\frac{4}{15}$	$\frac{4}{3}$
----------------	----------------	---------------

58

State if congruent / similar

Congruent - Yes / <input checked="" type="radio"/> No	Congruent - <input checked="" type="radio"/> Yes / No	Congruent - Yes / <input checked="" type="radio"/> No
Similar - Yes / <input checked="" type="radio"/> No	Similar - <input checked="" type="radio"/> Yes / No	Similar - Yes / <input checked="" type="radio"/> No

59

Express the following as Fractions

17.3	2.089	2.98	14.7
$17\frac{3}{10}$	$2\frac{89}{1000}$	$2\frac{98}{100}$	$14\frac{7}{10}$

60

Express the following as decimals

$\frac{145}{10}$	$\frac{3}{100}$	$\frac{95}{10}$	$\frac{3094}{100}$
14.5	0.03	9.5	30.94

61 Write in expanded form as fractions

a) 6.108

$$6 + \frac{1}{10} + \frac{0}{100} + \frac{8}{1000}$$

b) 304.57

$$300 + 4 + \frac{5}{10} + \frac{7}{100}$$

62 Write in expanded form as decimals

a) 6.108

$$6 + 0.1 + 0.00 + 0.008$$

b) 304.57

$$300 + 4 + 0.5 + 0.07$$

63

1 gallon = 8 pints

1 gallon = 16 cups

3 gallons 5 pints + 7 gallons 13 pints

gallons	pints
3	5
+ 7	13
<hr/>	
10 gallons	18 pints

12 gallons 2 pints

7 gallons 30 cups - 5 gallons 7 cups

Gallons	Cups
7	30
- 5	7
<hr/>	
2 gallons	23 cups

3 Gallons 7 cups

64 Solve using a number line

(a)

$$-4 - 3 = -7$$

(b)

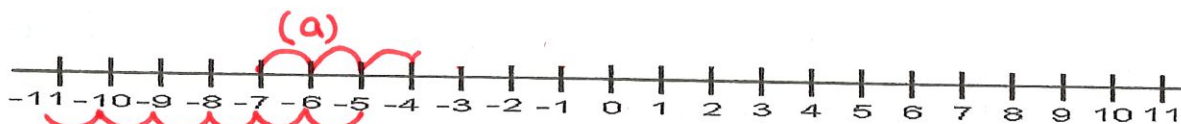
$$-11 + 6 = -5$$

(c)

$$-2 - 3 - 1 = -6$$

(d)

$$0 + 5 - 7 = -2$$



(b)

65	<p>a)</p> $\begin{array}{r} 256 \\ * 0.03 \\ \hline \end{array}$ <p>7.68</p>	<p>b)</p> $\begin{array}{r} 524 \\ * 0.04 \\ \hline \end{array}$ <p>20.96</p>	<p>c)</p> $\begin{array}{r} 897 \\ * 0.2 \\ \hline \end{array}$ <p>179.4</p>
	<p>d)</p> $\begin{array}{r} 3154 \\ * 0.02 \\ \hline \end{array}$ <p>63.08</p>	<p>e)</p> $\begin{array}{r} 1009 \\ * 0.03 \\ \hline \end{array}$ <p>30.27</p>	<p>f)</p> $\begin{array}{r} 7095 \\ * 0.2 \\ \hline \end{array}$ <p>1419.0</p>

66 Find the difference of the following numbers

$\begin{array}{r} 23.12 - 4.562 \\ \hline \end{array}$ $\begin{array}{r} 1 \ 12 \ 10 \ 11 \ 10 \\ 23.120 \\ - 4.562 \\ \hline 18.558 \end{array}$	$\begin{array}{r} 5.017 - 2.572 \\ \hline \end{array}$ $\begin{array}{r} 4 \ 9 \ 11 \\ 5.017 \\ - 2.572 \\ \hline 2.445 \end{array}$	$\begin{array}{r} 11.11 - 9.9 \\ \hline \end{array}$ $\begin{array}{r} 0 \ 11 \\ 11.11 \\ - 9.90 \\ \hline 1.21 \end{array}$
18.558	2.445	1.21

67

(a)	(b)	(c)
$\begin{array}{r} 4x + 6y \\ + 10x - y \\ \hline \end{array}$	$\begin{array}{r} 1x + 3y \\ + 9x - y \\ \hline \end{array}$	$\begin{array}{r} 2a + 13b \\ + 1a - 2b \\ \hline \end{array}$
14x + 5y	10x + 2y	3a + 11b

Hint [y = 1y]

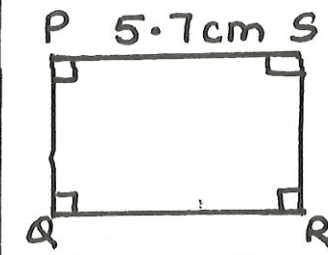
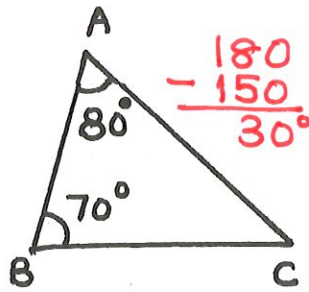
Sum(all angles) of a $\Delta = 180^\circ$

(a)

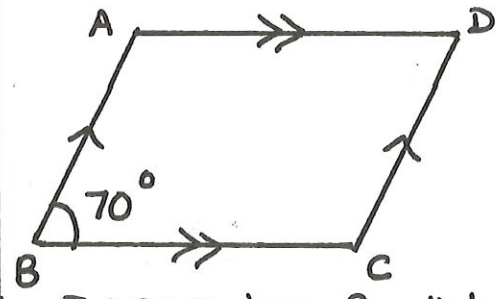
(b)

(c)

68



\square PQRS is Rectangle



\square ABCD is a Parallelogram

$\angle C = \boxed{30^\circ}$

$\overline{QR} = \boxed{5.7}$ cm

$\angle A = \boxed{110^\circ}$

Adjacent angles are supplementary

69

Write down all the factors of

50

1	2	5	-	-	-
50	25	10	-	-	-

72

1	2	3	4	6	8
72	36	24	18	12	9

70

Find Mode, Range and Median

33, 45, 40, 23, 42, 32, 33

Ascending Order

23, 32, 33, 33, 40, 42, 45

Range = $45 - 23$

Range = 22

Median = 33

Mode = 33

71

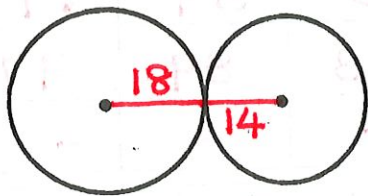
How many seconds

a) 9 minutes	$9 \times 60 = 540$ Seconds.
b) 5 minutes	$5 \times 60 = 300$ Seconds.
c) 10 minutes	$10 \times 60 = 600$ Seconds

72

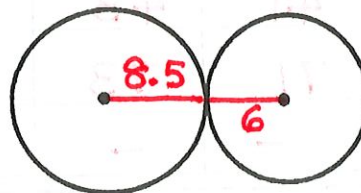
Find the distance between the centers of the two circles

Radii of the two circles are 14 cm and 18 cm



$$18 + 14 = 32 \text{ cm}$$

Diameters of the two circles are 12 cm and 17 cm



$$8.5 + 6 = 14.5 \text{ cm}$$

73

A family bought 2 and a quarter liter of milk each day. How much milk did they get in the month of

January 31 days
Milk = 2.25×31 liters

$$\begin{array}{r} 225 \\ \times 31 \\ \hline 6975 \end{array}$$

69.75 liters

June 30 days

$$\begin{array}{r} 69.75 \\ - 2.25 \\ \hline 67.50 \end{array}$$

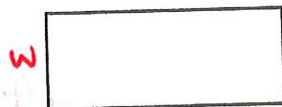
67.50 liters

74

Find the width of a rectangle if

Perimeter = 50 cm

Length = 20 cm



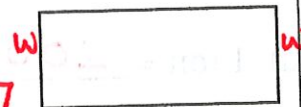
$$50 = 20 + 20 + w + w$$

$$50 = 40 + 2w$$

$$w = 5 \text{ cm}$$

Perimeter = 9.6 cm

Length = 3.7 cm



$$9.6 = 3.7 + 3.7 + w + w$$

$$9.6 = 7.4 + 2w$$

$$w = 1.1 \text{ cm}$$

75

seventy thousand - twenty two thousand one hundred fifty five +

a)

five hundred and seven tens =

$$\begin{array}{r} 70,000 \\ - 22,155 \\ \hline 47,845 \end{array}$$

$$48,415$$

$$\begin{array}{r} 9000 \\ + 82170 \\ \hline 91170 \\ - 505 \\ \hline \end{array}$$

Nine thousand + eighty two thousand one hundred seventy -

b)

five hundred and five ones =

$$90,665$$

76

Write down all the 2 digit prime numbers

11	13	17	19	23	29	31
37	41	43	47	53	59	61
67	71	73	79	83	89	97
-	-	-	-	-	-	-

77

What is the perimeter of an equilateral triangle if its each side is

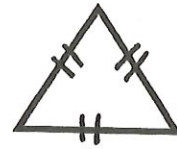
1.28 cm

$$\begin{array}{r} 1.28 \\ \times 3 \\ \hline 3.84 \end{array}$$



1.09 cm

$$\begin{array}{r} 1.09 \\ \times 3 \\ \hline 3.27 \end{array}$$



3.84 cm

3.27 cm

78

Fill in the blanksa) The place value of 3 in 72.153 is = $\frac{3}{1000}$ b) The place value of 5 in 72.153 is = $\frac{5}{100}$

c) The place value of 7 in 72.153 is = 70

d) 1 ton = 2000 pounds

$$e) \frac{14}{8} - \frac{2}{8} + \frac{3}{8} = \frac{15}{8}$$

$$\frac{14 - 2 + 3}{8} = \frac{15}{8}$$

f) Two-thirds of 60 is 40

$$\frac{2}{3} \times 60 = 2 \times 20$$

g) one foot = 12 inches

h) Three feet = 36 inches

Pg (24)

79

Convert into meters

(Hint: 1 kilometer = 1000 meters)

3 kilometers

3,000 m

4.25 kilometers

4,250 m

2.5 kilometers

2,500 m

7.85 kilometers

7,850 m

80

Name and draw the three different types of triangles based on the lengths of their sides

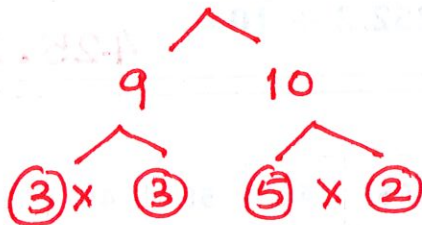
Scalene Δ Isosceles Δ Equilateral Δ 

Name and draw any three different types of Quadrilaterals

Isosceles TrapezoidRhombusParallelogramRectangleSquare

81

Prime Factorize: 90



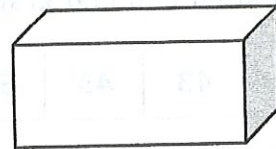
$$90 = 2 \times 3 \times 3 \times 5$$

Find the Volume of a box if

l: length is 3cm

w: width is 4cm

h: height is 4cm



Volume

$$= L \times W \times H$$

$$= 3 \times 4 \times 4$$

$$\text{Volume} = 48 \text{ cubic cm}$$

81 b

$$1 + 2 + 3 + 4 + 5 + 6 + 7$$

$$= 11 + 22 + 33 + 44 + 55 + 66 + 77 - \boxed{?}$$

$$10 + 20 + 30 + 40 + 60 + 70 = 80 + 80 + 70 + 50 + 50$$

$$= 230 + 50$$

$$\boxed{280}$$

82

Multiply

$$\begin{array}{r}
 2075 \\
 * 83 \\
 \hline
 6225 \\
 +166000 \\
 \hline
 172225
 \end{array}$$

172,225

Multiply

$$\begin{array}{r}
 3,278 \\
 * 53 \\
 \hline
 9834 \\
 +163900 \\
 \hline
 173,734
 \end{array}$$

173,734

83

- a) $3.897 * 10 = 38.97$
- b) $3.897 * 100 = 389.7$
- c) $3.897 * 1000 = 3897$
- d) $356.7 * 10 = 3567$

- e) $4252.2 \div 10 = 425.22$
- f) $4252.2 \div 100 = 42.522$
- g) $4252.2 \div 1000 = 4.2522$
- h) $4252.2 \div 10 = 425.22$

84

Draw stem and leaf graph for

45	43	43	52	54	65	55	56	48	58	45	50
----	----	----	----	----	----	----	----	----	----	----	----


Stem	Leaf
4	3, 3, 5, 5, 8
5	0, 2, 4, 5, 6, 8
6	5

85

What probability?

A number is chosen at random from 30 to 50. What is the probability that it will be divisible by 4	$\frac{5}{21}$	A number is chosen at random from 15 to 30. What is the probability that it will be a prime number?	$\frac{4}{16} = \frac{1}{4}$
32, 36, 40, 44, 48		17, 19, 23, 29	

86 Find the perimeter of the Regular Pentagon if each side is 1.8 cm



Perimeter = $1.8 \times 5 = 9.0$

What are the next three numbers in the pattern:
72, 36, 18, 9, 4.5, 2.25
Rule = $\div 2$

9 cm

9, 4.5, 2.25

87 What is the difference of the two missing terms of this sequence:

5	6	6	7	7	7	8	8
---	---	---	---	---	---	---	---

Difference = $8 - 8 = 0$

0

Andy is counting backwards by threes. The first number he says is 80. What is the sixth number Andy will say?

I	II	III	IV	V
80	77	74		

65

88 Complete the sequence

Rule : $+1, +2, +3 \dots$

a)

18	19	21	24	28	33	39
----	----	----	----	----	----	----

Rule = -40

b)

900	860	820	780	740	700
-----	-----	-----	-----	-----	-----

89 Wilson's mom gave him \$100 to buy his soccer supplies. He spent \$ 45.09 on soccer shoes, \$ 24.50 on a ball and \$ 16.75 on his clothes. How much money, in dollars, is left after his shopping?

Shoes = \$ 45.09
ball = \$ 24.50
clothes = \$ 16.75
Sum \$ 86.34

Left Over $100.00 - 86.34 = \$ 13.66$

\$ 13.66

90

Solve

$12.177 * 0.4$	$39.08 - 16.198$	$14.098 + 2.78$
$\begin{array}{r} 12177 \\ \times 4 \\ \hline 48708 \end{array}$	$\begin{array}{r} ^8 ^9 ^{17} ^{10} \\ 39.080 \\ - 16.198 \\ \hline 22.882 \end{array}$	$\begin{array}{r} 14.098 \\ + 2.780 \\ \hline 16.878 \end{array}$
4.8708	22.882	16.878

91

- a) The smallest counting number is 1
- b) 9 pints make 18 cups
- c) 10 pints make 20 cups
- d) Was the year 1990 a leap year? No
- e) Will the year 2030 be a leap year? No
- f) A triangle with no sides equal is called Scalene Triangle.
- g) The smallest 4 digit number formed by using the digits 6, 9, 0, 2 only once is 2069

$$\begin{array}{r} 507 \\ 4 \overline{) 2030} \\ \underline{- 20} \\ 30 \\ \underline{- 28} \\ 2 \end{array}$$

$$\begin{array}{r} 497 \\ 4 \overline{) 1990} \\ \underline{- 16} \\ 39 \\ \underline{- 36} \\ 30 \\ \underline{- 28} \\ 2 \end{array}$$

92

What is the perimeter of a regular heptagon with side length of three and half centimeters?

Heptagon has 7 sides

$$\begin{array}{r} 3.5 \\ \times 7 \\ \hline 24.5 \text{ cm} \end{array}$$

24.5 cm

Hint : Heptagon is a quadrilateral with Seven Sides

93

12, 10, 9, 2, 10, 5, 7, 10, 8, 12, 3

Ascending Order


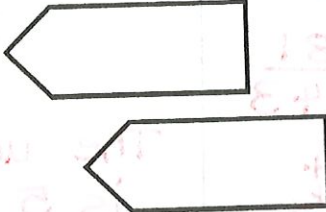
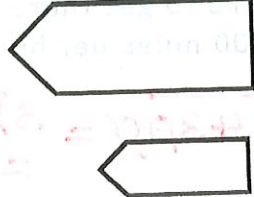
2, 3, 5, 7, 8, 9,

10, 10, 10, 12, 12

Range = $12 - 2 = 10$ Range = 10Median = 9Mode = 10

94

State if congruent / similar

(a)	(b)	(c)
		
Congruent Yes / <u>No</u>	Congruent <u>Yes</u> / No	Congruent Yes / <u>No</u>
Similar Yes / <u>No</u>	Similar <u>Yes</u> / No	Similar <u>Yes</u> / No

95

A grandmother distributed \$ 132 among Anna, Michael and Drew equally. How much money does each one get?

$$\begin{array}{r} 44 \\ 3 \overline{)132} \\ \underline{-12} \\ 12 \\ \underline{-12} \\ 0 \end{array}$$

\$ 44

96

A grandmother distributed \$ 1000 among 5 children. How much money will each child get?

$$\begin{array}{r} 200 \\ 5 \overline{)1000} \\ \underline{-10} \\ 00 \\ \underline{-00} \\ 00 \\ \underline{-00} \\ 00 \end{array}$$

\$ 200

Pg (29)

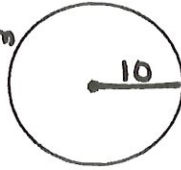
97

What is the circumference of a circle of radius 10 cm?

$$\text{Circumference} = \pi * \text{diameter}$$

$$\text{Diameter} = 20 \text{ cm}$$

$$= \pi \times 20$$



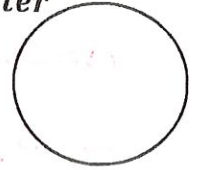
$$20\pi \text{ cm}$$

What is the circumference of a circle of radius 5 cm?

$$\text{Circumference} = \pi * \text{diameter}$$

$$= \pi \times 10 \text{ cm}$$

$$= 10\pi \text{ cm}$$



$$10\pi \text{ cm}$$

98

If the space station is 54,300 miles from the earth, how long, in hours, would it take to get there if you travel at 300 miles per hour?

$$300 \overline{) 54300} = 181$$

$$\begin{array}{r} 181 \\ 3 \overline{) 543} \\ \underline{3} \\ 24 \\ \underline{24} \\ 03 \end{array}$$

$$181 \text{ Hours}$$

What is the units or ones place of 165 times 143

$$\begin{array}{r} 165 \\ \times 143 \\ \hline 5 \end{array}$$

The units place digit is 5

$$5$$

99

What are the missing numbers in the pattern:

2510, 2520, _____, _____, 2550

$$\text{Rule} = +10$$

Missing #'s

$$2530, 2540$$

Write down the decimal equivalent to the given fraction

Fraction	Equivalent Decimal
$\frac{703}{10}$	70.3
$\frac{58}{10}$	5.8
$\frac{7}{10}$	0.7

100

Maria has 6 boxes that each can hold 45 books. She has 10 shelves of books that she needs to pack in boxes. Each shelf holds 32 books. How many books will fit in 6 boxes? How many books will be left over?

Number (books on the shelf)

$$= 10 \times 32$$

$$= 320 \text{ books}$$

6 boxes can hold

$$45 \times 6$$

$$= 270 \text{ books}$$

$$\begin{array}{r} 320 \\ - 270 \\ \hline 50 \end{array}$$

$$50 \text{ books left over}$$

Pg (30)

$$\text{Diameter} = 2 \times \text{Radius}$$

101

Rahul has 19 quarters, 8 nickels and 22 dimes. How much money does he have in all in dollars?

$$19 \text{ quarters} = 19 \times 0.25 = \$4.75$$

$$8 \text{ Nickels} = 8 \times 0.05 = \$0.40$$

$$22 \text{ dimes} = \$2.20$$

$$\boxed{\$7.35}$$

Find the Diameter of a circle if Radius is

Radius	Diameter
5.8 m	11.6 m
4.05 m	8.10 m
13.03 m	26.06 m

102

Answer

a)

$$21 + 21 + 21 = 41 + 41 + 41 - \text{????}$$

$$20 + 20 + 20$$

60

b)

$$11 + 22 - 33 + 44 = 1 + 2 - 3 + 4 + \text{????}$$

$$10 + 20 - 30 + 40$$

40

c)

$$50 + 200 + 150 = \text{????} \times 50$$

$$50 + 200 + 150 = 400$$

8

103

Which product is odd units place

a) 11×99 9

b) 44×33 2

c) 55×22 0

d) 88×66 8

$$\boxed{11 \times 99}$$

Linda has 59 hair clips. She gave 11 of them to her sister Lina and then distributed the rest among 5 of her friends equally. What is the most number of hair clips each friend will get?

$$\begin{array}{r} 59 \\ -11 \\ \hline 48 \end{array}$$

$$\begin{array}{r} 9 \\ 5 \overline{)48} \\ \underline{-45} \\ 3 \end{array}$$

Each friend

has $\boxed{9}$ clips

104

If the radius of a circle is 45 cm, what is the diameter of the circle?



$$\begin{array}{r} 45 \\ \times 2 \\ \hline 90 \end{array}$$

$\boxed{90 \text{ cm}}$

If the radius of a circle is 16 cm, what is the diameter of the circle?



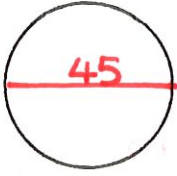
$$\begin{array}{r} 16 \\ \times 2 \\ \hline 32 \end{array}$$

$\boxed{32 \text{ cm}}$

Pg (31)

105

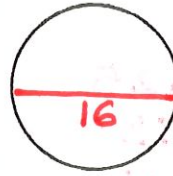
If the diameter of a circle is 45 cm, what is the radius of the circle?



$$\begin{array}{r} 22 \\ 2 \overline{)45} \\ \underline{-4} \\ 5 \\ \underline{-4} \\ 10 \\ \underline{-10} \\ 0 \end{array}$$

22.5 cm

If the diameter of a circle is 16 cm, what is the radius of the circle?



$$16 \div 2$$

8 cm

106

How many feet?

One yard =

3 feet

2.5 yards =

$$2.5 \times 3$$

7.5 feet

5 yards =

15 feet

3.1 yards =

$$3.1 \times 3$$

9.3 feet

107

24 hours equals how many minutes?

$$\begin{array}{r} 24 \\ \times 60 \\ \hline 00 \\ 144 \\ \hline 1440 \end{array}$$

1440 minutes

What is the value of $\frac{2}{5}$ of 40?

$$\frac{2}{5} \times 40 = \frac{80}{5}$$

$$\begin{array}{r} 16 \\ 5 \overline{)80} \\ \underline{-5} \\ 30 \\ \underline{-30} \\ 0 \end{array}$$

16

108

Express as mixed fractions

a)

$$\frac{16}{5}$$

3 $\frac{1}{5}$

b)

$$\frac{19}{6}$$

3 $\frac{1}{6}$

c)

$$\frac{22}{10}$$

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

You start at (3, 2) and go 5 spaces to the right and 2 spaces up. Which point do you reach?

$$\begin{array}{r} x \quad y \\ (3, 2) \\ +5 \quad +2 \end{array}$$

(8, 4)

You start at (0, 4) and go 5 space to the right and 2 spaces up. Which point do you reach?

$$\begin{array}{r} x \quad y \\ (0, 4) \\ +5 \quad +2 \end{array}$$

(5, 6)

Pg (32)

109

What is the value of $\frac{3}{4}$ of 18?

$$\frac{3}{4} \times 18 = \frac{54}{4}$$

$$5 \overline{)54} = \frac{50}{4}$$

13.5

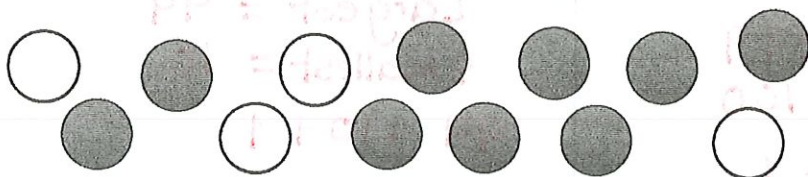
What is the ratio of the days in April 2016 to that in February 2017?

$$\begin{array}{l} \text{April : Feb} \\ 2016 : 2017 \\ = 30 : 28 \end{array}$$

30:28

110

Which fraction tell you how many dots are shaded

 $\frac{9}{13}$

111

What is the smallest three digit number divisible by both 5 and 3?

Divisible by 5 and 3
= Divisible by 15
 $15 \times 6 = 90$
 $15 \times 7 = 105$

105

Ten years ago, Randy's age was 20 years. What will be his age 13 years from now?

	Randy's age
10 years ago	20 years
Today	30 years
13 years later	30 + 13

43 years

112

What is the smallest three digit number divisible by both 2 and 3?

Divisible by 2 and 3
= Divisible by 6

$$6 \overline{)100} = \frac{100}{6} = \frac{102}{6}$$

102

Amanda is three times as old as Anna now. What was Amanda's age 2 years ago if Anna is 13 years old now?

Amanda	Anna	
$13 \times 3 = 39$	13	Now
$39 - 2$	$13 - 2$	2 years ago

37 years

113	<p>Find the first two common multiples of 2 and 5</p> <p>Common multiples of 2 and 5 are 10 and 20</p>	<p>Find the first two common multiples of 4 and 3</p> <p>Common multiples of 4 and 3 are multiples of 12</p>																												
	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;">10 and 20</div>	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;">12 and 24</div>																												
114	<p>How many three digit numbers are there in all?</p> <p>Largest = 999 Smallest = 100 $999 - 100 + 1$ $= 899 + 1$</p>	<p>How many two digit numbers are there in all?</p> <p>Largest = 99 Smallest = 10 $99 - 10 + 1$ $= 89 + 1$</p>																												
	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;">900</div>	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;">90</div>																												
115	<p>What is the area of a square box with each side 30 cm?</p> <p>Area = Side x side</p> $\begin{array}{r} 30 \\ \times 30 \\ \hline 900 \end{array}$	<p>What is the perimeter of a triangular chocolate box with each side 40.9 cm?</p> $\begin{array}{r} 40.9 \\ \times 3 \\ \hline 122.7 \end{array}$																												
	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;">900 sqcm</div>	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;">122.7 cm</div>																												
116	<p>Are the following numbers or words palindromes (YES / NO)?</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 5%; text-align: center;">a)</td> <td style="width: 25%;">DAD</td> <td style="width: 20%; text-align: center;">Yes</td> <td style="width: 5%;"></td> <td style="width: 25%; text-align: center;">e)</td> <td style="width: 20%;">239,099</td> <td style="text-align: center;">No</td> </tr> <tr> <td style="text-align: center;">b)</td> <td>RAIN</td> <td style="text-align: center;">No</td> <td></td> <td style="text-align: center;">f)</td> <td>43,543</td> <td style="text-align: center;">No</td> </tr> <tr> <td style="text-align: center;">c)</td> <td>TOPPOT</td> <td style="text-align: center;">Yes</td> <td></td> <td style="text-align: center;">g)</td> <td>43,534</td> <td style="text-align: center;">Yes</td> </tr> <tr> <td style="text-align: center;">d)</td> <td>VANE</td> <td style="text-align: center;">No</td> <td></td> <td style="text-align: center;">h)</td> <td>101</td> <td style="text-align: center;">Yes</td> </tr> </tbody> </table>		a)	DAD	Yes		e)	239,099	No	b)	RAIN	No		f)	43,543	No	c)	TOPPOT	Yes		g)	43,534	Yes	d)	VANE	No		h)	101	Yes
a)	DAD	Yes		e)	239,099	No																								
b)	RAIN	No		f)	43,543	No																								
c)	TOPPOT	Yes		g)	43,534	Yes																								
d)	VANE	No		h)	101	Yes																								

(Use number line if necessary)

117	a) $7 - 6 =$	1	g) $-2 + 4 =$	2
	b) $6 + 5 =$	11	h) $4 - 2 =$	2
	c) $1 + 6 =$	7	i) $6 + 3 =$	9
	d) $-8 + 6 =$	-2	j) $9 + 2 =$	11
	e) $-3 - 6 =$	-9	k) $1 - 8 =$	-7
	f) $-3 + 1 =$	-2	l) $6 - 9 =$	-3

118 A number is chosen at random from 1-30. What is the probability of selecting a number having a ten's place digit 4?

There is no
tens place digit
4 between
1-30

$$\frac{0}{30}$$

$$= 0$$

A number is chosen at random from 1-20. What is the probability of selecting a number less than 15?

Less than 15
= 1 to 14
= 14 #'s

$$\frac{14}{20}$$

or

$$\frac{7}{10}$$

119 A number is chosen at random from 1-25. What is the probability of selecting a multiple of 5?

Multiples of 5 $\frac{5}{25}$ or

5, 10, 15, 20,
25

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

A number is chosen at random from 1-20. What is the probability of selecting an even number?

2, 4, 6, 8, ..., 20

$$\frac{10}{20}$$

or

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

120 Anna is 9 years old. Her grandfather is 7 times Anna's age. How old is Anna's grandfather?

$$\begin{aligned} \text{Grand father} &= 7 \times 9 \\ &= 63 \end{aligned}$$

63 years

121	<p>Tony's aunt is 36 years old. Tony is one-fourth her age. How old is Tony?</p> $\frac{1}{4} \times 36 = \frac{36}{4}$ $4 \overline{)36}$ $\begin{array}{r} 9 \\ -36 \\ \hline 0 \end{array}$ <p>Tony is 9 years</p>	<p>Compare $\frac{4}{5}$ to $\frac{7}{9}$? Which one is greater why?</p> <p>Make the fractions equivalent</p> $\frac{4}{5} = \frac{4 \times 9}{5 \times 9} = \frac{36}{45}$ $\frac{7}{9} = \frac{7 \times 5}{9 \times 5} = \frac{35}{45}$ <p>$\frac{4}{5}$ is Greater </p>
122	<p>Solve: $36 + 8 \div 2 - 4$</p> <p>Using PEMDAS</p> $36 + 4 - 4 = 40 - 4 = 36$ <p>36</p>	<p>200×11.3</p> $\begin{array}{r} 113 \\ \times 2 \\ \hline 226 \end{array}$ <p>2260.0 2,260</p>
123	<p>Three friends want to be at the front of a line to buy a new game console at Superstore. How many different ways could the three friends line up in front of the store? Let the 3 friends be A, B, C</p> <p>different ways</p> <p>A, B, C B, A, C C, A, B A, C, B B, C, A C, B, A</p> <p>6 ways</p>	
124	<p>What is the approximate cost of taking a 400 mile trip if you get 25 miles per gallon of gas and the gas costs \$1.60 per gallon?</p> $25 \overline{)400}$ $\begin{array}{r} 16 \\ -25 \\ \hline 150 \\ -150 \\ \hline 0 \end{array}$ $\begin{array}{r} \$16 \\ \times 1.60 \\ \hline \$25.60 \end{array}$ <p>\$ 25.60</p>	<p>What change will you get back if you purchase 7 bananas at \$0.15 each, two package of gum for \$0.75, and bottled water for \$1.10 if you gave the cashier \$ 10.</p> $7 \times 0.15 = \$ 1.05$ $2 \times 0.75 = \$ 1.50$ $1 \times 1.10 = \$ 1.10$ $\text{Sum} = \$ 3.65$ <p>Change =</p> $\begin{array}{r} \$10.00 \\ - \$ 3.65 \\ \hline = \$ 6.35 \end{array}$ <p>\$ 6.35</p>

125

What is the name that describes all four-sided figures that have opposite sides parallel?



Parallelogram

If the perimeter of a rectangle is 16 units and the area is 16 sq. units, What could be the dimensions of the rectangle (in units)?

$$\text{Perimeter} = 4 \times \text{Side}$$

$$16 = 4(\text{Side})$$

$$\text{Area} = (\text{Side}) \times (\text{Side})$$

$$16 = (\text{Side})(\text{Side}) \quad \boxed{\begin{array}{l} \text{Side} \\ = 4 \text{ units} \end{array}}$$

126

How many centimeters

Meters	Centimeters
13 m	1300 cm
8 m	800 cm
9 m	900 cm
13.89 m	1389 cm

A mile is 5,280 feet. How many inches are in a mile?

$$1 \text{ foot} = 12 \text{ inches}$$

$$5280$$

$$\times 12$$

$$\hline 10560$$

$$+52800$$

$$\hline 63,360$$

63,360 inches

127

What is the volume of a rectangular prism with length 5 cm, width 4 cm and height 10 cm



Volume

$$= L \times W \times H$$

$$= 5 \times 4 \times 10$$

$$200 \text{ cm}^3$$

128

Find the value for the expression:

$$\frac{32}{4} + (16 - 4) * 3 \div 6$$

$$8 + 12 * 3 \div 6$$

$$= 8 + 12 * \frac{1}{2}$$

$$= 8 + 6$$

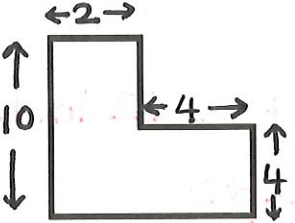
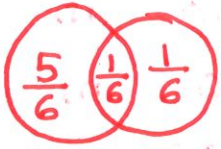
14

How many meters

Kilometers	Meters
13 km	13,000 m
8 km	8,000 m
9 km	9,000 m
110 km	110,000 m

Using PEMDAS (do division first)

Pg 37

<p>129</p>	<p>A contest began at noon one day and ended 100 minutes later. At what time did the contest end?</p> $\begin{array}{r} 1 \\ 60 \overline{)100} \\ \underline{60} \\ 40 \end{array}$ <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>1 Hour 40 min</p> </div>	<p>How many numbers from 50-80 have a figure '7' in them?</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td colspan="2" style="text-align: right;"><u>7's</u></td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">50-59</td> <td style="padding: 5px;">1</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">60-69</td> <td style="padding: 5px;">1</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">70-80</td> <td style="padding: 5px;">10</td> </tr> </table> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>12 Numbers</p> </div>	<u>7's</u>		50-59	1	60-69	1	70-80	10
<u>7's</u>										
50-59	1									
60-69	1									
70-80	10									
<p>130</p>	<p>What is the perimeter of the shown polygon?</p>  <p style="text-align: center;">$10 + 2 + 4 + 10 + 6$ $= 20 + 12$</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>32</p> </div>	<p>A contest began at noon one day and ended 840 minutes later. At what time did the contest end?</p> $\begin{array}{r} 14 \\ 60 \overline{)840} \\ \underline{-60} \\ 240 \\ \underline{-240} \\ 0 \end{array} = 14 \text{ Hours}$ <p style="text-align: right;">$= 12 \text{ Noon} + 14 \text{ Hours}$</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>2:00 AM</p> </div>								
<p>131</p>	<p>Jane needs 51 cents to buy a chocolate bar, while Steve needs 45 cents to buy it. Together they can buy one chocolate bar with 2 cents remaining. How much money do they have each?</p> $51 + 45 + 2 \text{ Cents}$ $= 51 + 47 \text{ Cents}$ <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>98 Cents</p> </div>									
<p>132</p>	<p>Two different circles overlap. The area of the overlapping region is $\frac{1}{2}$ of the area of the smaller circle and is $\frac{1}{6}$ of the area of the larger circle. What is the ratio of the area of the smaller circle to the larger circle?</p>  $\frac{5}{6} \quad \frac{1}{6} \quad \frac{1}{6}$ $\frac{2}{6} : \frac{6}{6}$ $= 2 : 6$ <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>1:3</p> </div>									

C1

Solve: $71,321 + 14,389 - 7,082$

$$\begin{array}{r} 71,321 \\ + 14,389 \\ \hline 85,710 \\ - 7,082 \\ \hline 78,628 \end{array}$$

78,628

Solve: $119 * 11$

$$\begin{array}{r} 119 \\ \times 11 \\ \hline 119 \\ + 1190 \\ \hline 1309 \end{array}$$

1309

Find the value of

$$1 * 2 * 3 * 4 * 5 = \frac{6 \times 4 \times 5}{2 \times 3 \times 4 \times 5} = 120$$

$$8 * 9 * 10 = 72 \times 10 = 720$$

$$2 * 2 * 2 * 2 * 2 = 8 \times 8 = 64$$

C2

Solve: $65,721 + 27,119 - 35,637$

$$\begin{array}{r} 65,721 \\ + 27,119 \\ \hline 92,840 \\ - 35,637 \\ \hline 57,203 \end{array}$$

57,203

A library has 8,760 books. Out of these, 1,388 were damaged by termite and 2,099 were burnt in a fire. How many books remain at the library?

$$\begin{array}{r} 8,760 \\ - 1,388 \\ - 2,099 \\ \hline 5,273 \end{array}$$

5,273 books

$$420 \times 10 = 4,200$$

$$420 \times 100 = 42,000$$

$$90 \times 70 = 6,300$$

$$80 \times 40 = 3,200$$

C1

Solve: $81,341 + 10,000 - 7,089$

$$\begin{array}{r} 81341 \\ + 10000 \\ \hline 91341 \\ - 7089 \\ \hline 84252 \end{array}$$

84,252

C2

One fifth + One fifth makes	$\frac{2}{5}$
One tenth + two tenth makes	$\frac{3}{10}$
Five seventh + two seventh	$\frac{7}{7}$ or 1
Five ninth - two ninth	$\frac{3}{9}$ or $\frac{1}{3}$

Solve: $13,338 * 10$

$$\begin{array}{r} 13338 \\ \times 10 \\ \hline 133380 \end{array}$$

133,380

b)

One eleventh + five eleventh makes	$\frac{6}{11}$
ten eleventh - five eleventh makes	$\frac{5}{11}$
Five seventh - three seventh	$\frac{5-3}{7} = \frac{2}{7}$
Fifteen ninth - three ninth	$\frac{5-3}{9} = \frac{2}{9}$

c)

- one meter = 100 centimeter
- 9 meters = 900 centimeters
 - 7 meters = 700 centimeters
 - 12 meters = 1200 centimeters

Rough work space

$$\begin{array}{l} \frac{1}{10} + \frac{2}{10} = \frac{3}{10} \\ \frac{5}{7} + \frac{2}{7} = \frac{7}{7} \\ \frac{5}{9} - \frac{2}{9} = \frac{3}{9} \end{array} \quad \left| \quad \begin{array}{l} \frac{10}{11} - \frac{5}{11} = \frac{5}{11} \\ \frac{5}{7} - \frac{3}{7} = \frac{2}{7} \\ \frac{5}{9} - \frac{3}{9} = \frac{2}{9} \end{array} \right.$$

Pg

40

1) Multiply

$\begin{array}{r} 42 \\ \times 22 \\ \hline 84 \\ + 840 \\ \hline 924 \end{array}$	$\begin{array}{r} 31 \\ \times 20 \\ \hline 00 \\ + 620 \\ \hline 620 \end{array}$	$\begin{array}{r} 63 \\ \times 14 \\ \hline 252 \\ + 630 \\ \hline 882 \end{array}$
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2) Multiply

$\begin{array}{r} 84 \\ \times 23 \\ \hline 252 \\ + 1680 \\ \hline 1932 \end{array}$	$\begin{array}{r} 62 \\ \times 13 \\ \hline 186 \\ + 620 \\ \hline 806 \end{array}$	$\begin{array}{r} 49 \\ \times 40 \\ \hline 00 \\ + 1960 \\ \hline 1960 \end{array}$
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3) Solve * means times

a) $(30 + 11) - (6 * 5)$ $(30 - 11) - (6 + 5)$

$\downarrow \quad \quad \downarrow$
 $41 - 30$ $19 - 11$

11 8

b) $(20 \div 5) + 3 + (2 * 5)$ $(40 \div 8) - 3 + (2 * 5)$

$4 + 3 + 10$ $5 - 3 + 10$

$7 + 10$ $2 + 10$

17 12

c) $(6 + 8) - 3 + (63 \div 7)$ $(16 - 4) + 3 - (10 \div 2)$

$= 14 - 3 + 9$ $= 12 + 3 - 5$

$= 11 + 9$ $= 15 - 5$

20 10

4)	Divide	$\begin{array}{r} 3 \\ 7 \overline{) 24} \\ -21 \\ \hline 3 \end{array}$	$\begin{array}{r} 7 \\ 6 \overline{) 45} \\ -42 \\ \hline 3 \end{array}$	$\begin{array}{r} 8 \\ 9 \overline{) 73} \\ -72 \\ \hline 1 \end{array}$
		Q= 3 R= 3	Q= 7 R= 3	Q= 8 R= 1

5)	Divide	$\begin{array}{r} 40 \\ 2 \overline{) 80} \\ -8 \downarrow \\ \hline 00 \\ -0 \\ \hline 0 \end{array}$	$\begin{array}{r} 23 \\ 3 \overline{) 69} \\ -6 \\ \hline 09 \\ -9 \\ \hline 0 \end{array}$	$\begin{array}{r} 18 \\ 4 \overline{) 74} \\ -4 \downarrow \\ \hline 34 \\ -32 \\ \hline 2 \end{array}$
		Q= 40 R= 0	Q= 23 R= 0	Q= 18 R= 2

6)	Multiply	$\begin{array}{r} 1 \quad 1 \\ 343 \\ \times \quad 4 \\ \hline 1372 \end{array}$	$\begin{array}{r} 3 \quad 8 \\ 139 \\ \times \quad 9 \\ \hline 1251 \end{array}$	$\begin{array}{r} 7 \quad 4 \quad 3 \\ \times \quad 2 \\ \hline 1486 \end{array}$
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7)	$\begin{array}{r} 51 \\ \times 0 \\ \hline 0 \end{array}$	$\begin{array}{r} 51 \\ \times 1 \\ \hline 51 \end{array}$	$\begin{array}{r} 63 \\ + 12 \\ \hline 75 \end{array}$	$\begin{array}{r} 63 \\ - 12 \\ \hline 51 \end{array}$	$\begin{array}{r} 78 \\ \times 0 \\ \hline 0 \end{array}$	$\begin{array}{r} 42 \\ \times 0 \\ \hline 0 \end{array}$
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