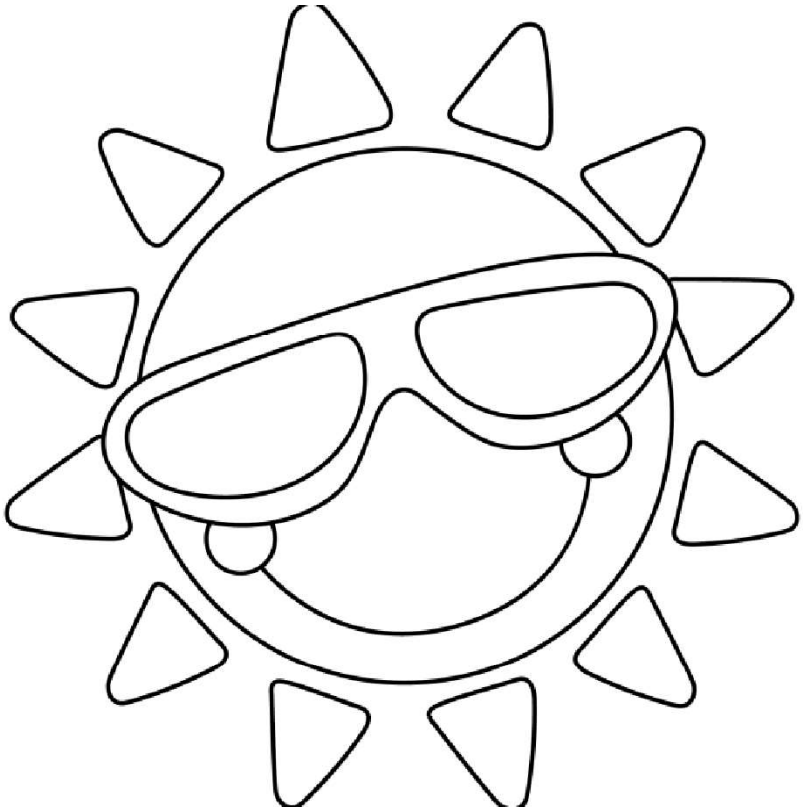
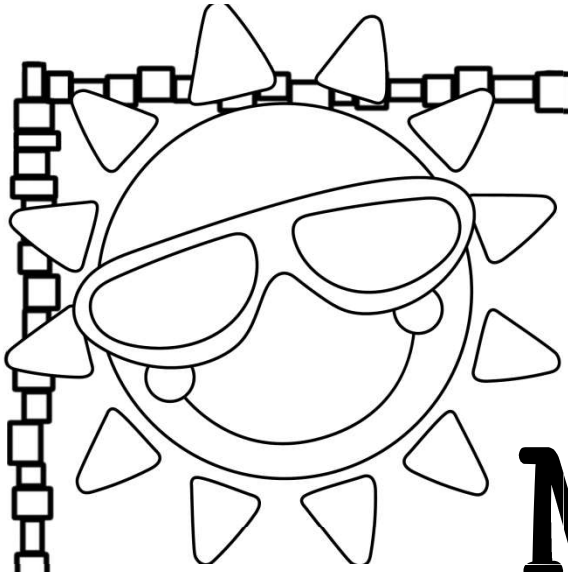
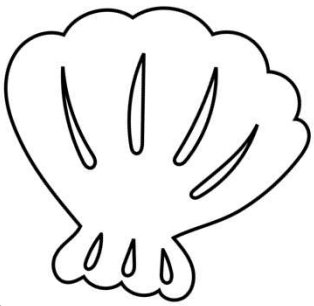
Print & Go
math PRACTICE

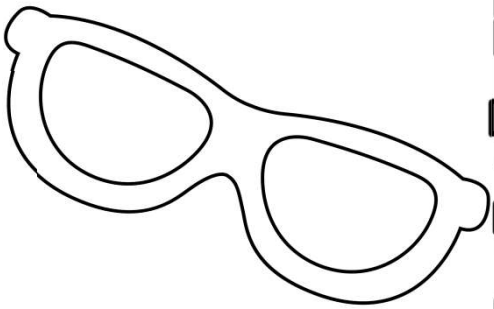


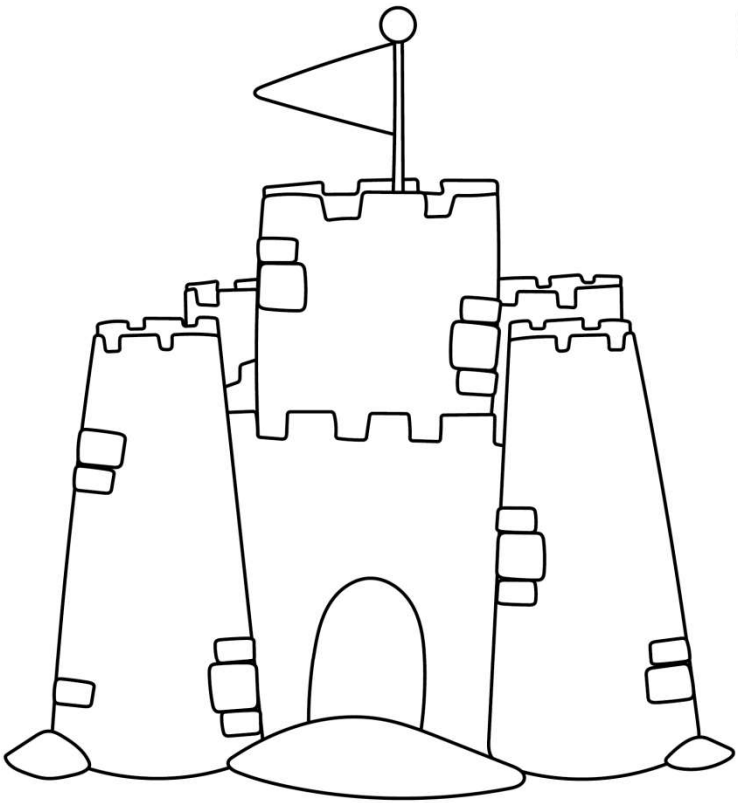
FREE from
The Curriculum Corner





My Math Practice Book

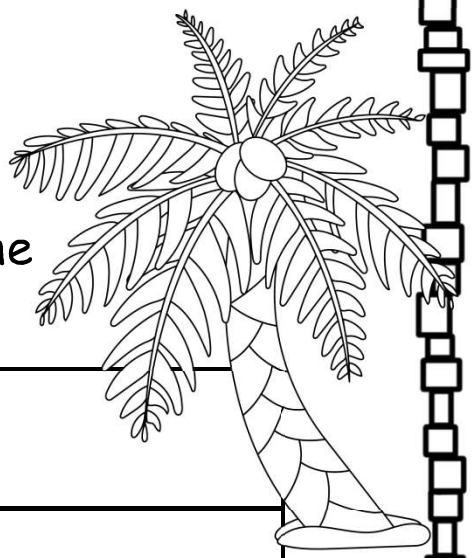




Name: _____

Name: _____

Rounding Numbers

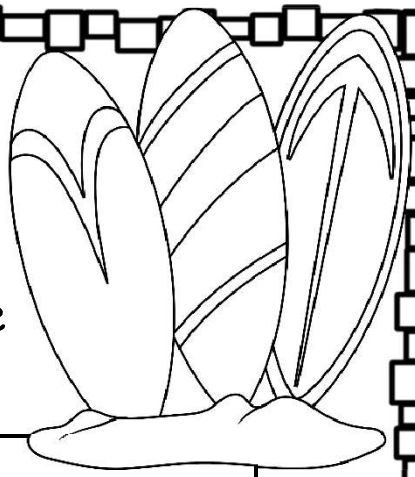


Directions: Round each number to the place of the underlined digit.

6,<u>4</u>82	
<u>8</u>,205	
48,<u>0</u>18	
32,9<u>0</u>5	
<u>5</u>1,103	
8<u>5</u>,828	
6<u>1</u>8,242	
<u>2</u>87,065	
4,927,<u>4</u>71	
165,<u>0</u>98,748	

Name: _____

Rounding Numbers



Directions: Round each number to the place of the underlined digit.

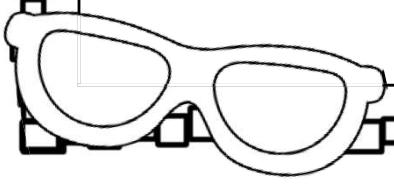
42.0<u>4</u>8	
<u>8</u>,205	
48,<u>0</u>18	
72.3<u>0</u>5	
<u>5</u>7.18	
2<u>5</u>.88	
3<u>1</u>8.46	
87,0<u>6</u>7	
8,327.<u>4</u>72	
235,075.<u>2</u>05	

Name: _____

Expanded Form

Directions: Write each number in expanded form.

824,928	
297,390	
148,027	
2,598,184	
3,027,476	
7,198,275	

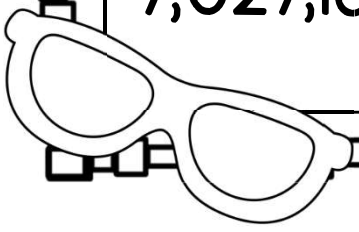


Name: _____

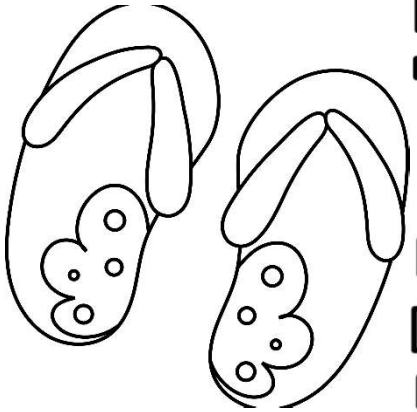
Word Form

Directions: Write each number in word form.

42,485	
20,975	
37,021	
5,298,285	
4,170,782	
7,027,169	



Name: _____



Ordering Numbers

Directions: Write the numbers in order from least to greatest.

4.291	4.295	4.627	4.023

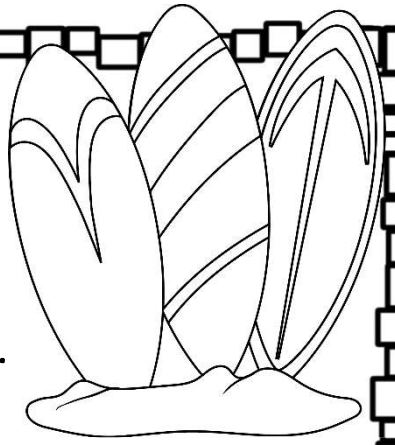
2.779	2.6003	2.098	2.146

19.071	19.08	19.1	19.01

254.9	25.4	2,548	2.085

Name: _____

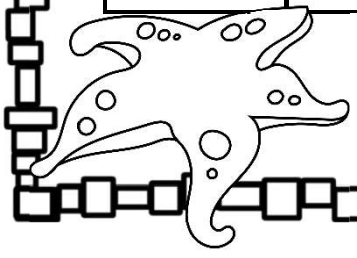
Use >, < or =



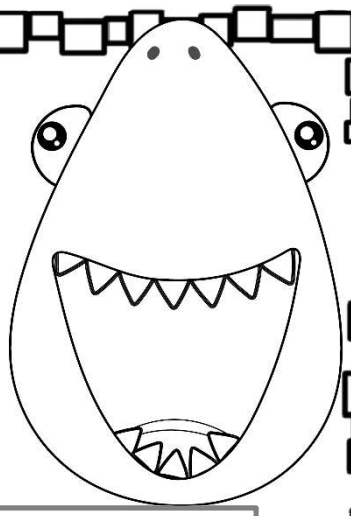
Directions: Compare each set of numbers. Use the correct sign.

3.928		3.902
6.303		6.303
24.94		29.94
30.75		30.57
71.02		71.02
85.21		80.27

5.822		8.522
3.077		3.700
60.45		40.65
1.179		1.917
12.01		12.00
16.77		17.67



Name: _____



Ordering Decimals

Directions: Write the numbers in order from least to greatest.

1.36, 1.3, 1.63, 1.03

0.3, 0.13, 0.19, 0.31

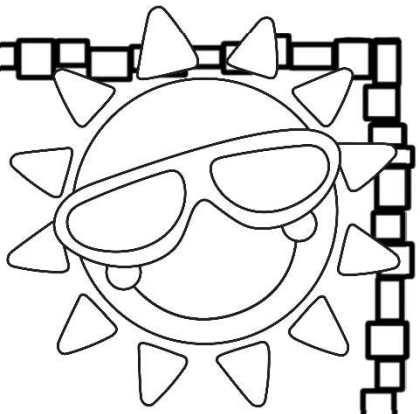
6.46, 6.41, 4.06, 4.6

0.42, 3.74, 4.2, 3.47

Name: _____

Multi-Step Word Problems

Solving word problems.



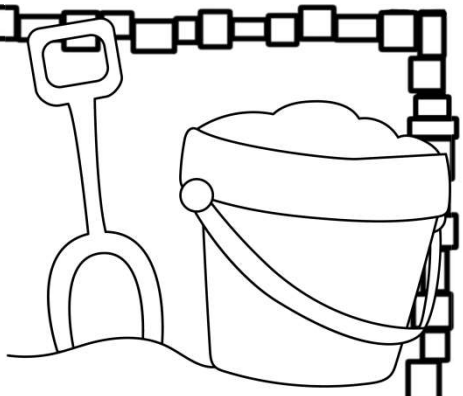
Kendra has a ten-dollar bill, a twenty-dollar bill and a five-dollar bill. She bought a shirt for $18.49. How much money does she have left?

Tyson is going to the movies. He has two five-dollar bills and a ten-dollar bill. His ticket is $7.25. He buys a popcorn for $4.50 and a drink for $3.75. How much money does he have left?

Lexie earned $20 mowing her yard and $15 mowing her neighbor's yard. She is saving money to buy a new game that costs $42.99. How much more money does she need to earn?

Name: _____

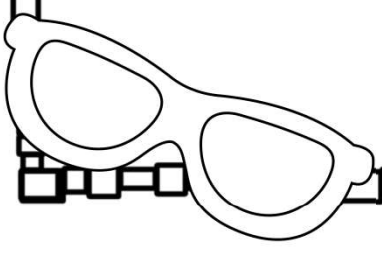
Addition & Subtraction



5,359	24,783	70,524
+6,326	-21,495	+46,509

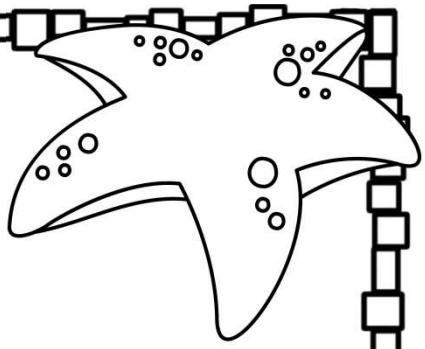
68,900	64,704	758,930
-11,182	+24,756	-479,672

67	735	1,682
93	846	7,842
+62	+265	+3,275

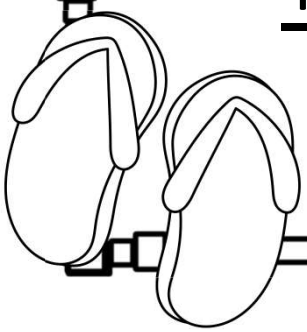


Name: _____

Addition & Subtraction of Decimals



3.486	8.365	5.703
+6.322	-4.835	+6.843
37.457	47.756	578.246
-24.846	+24.757	-244.255
2.5	78.2	45.07
7.4	67.9	37.76
+4.8	+24.4	+21.83

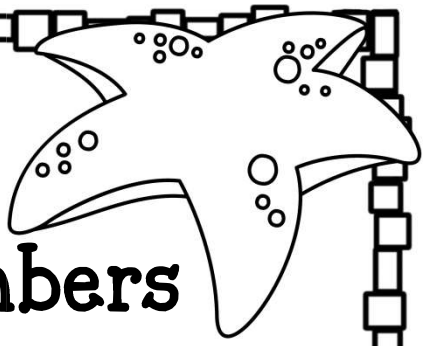


Name: _____

Using Mental Math to Multiply

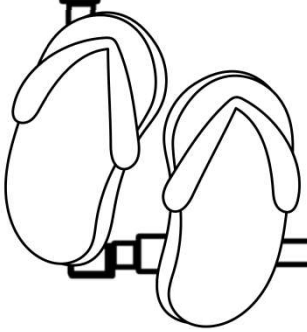
80 x 90 =	30 x 9 =
40 x 60 =	20 x 800 =
80 x 7,000 =	20 x 600 =
50 x 800 =	60 x 300 =
70 x 400 =	1,200 x 80 =
6,000 x 500 =	4,000 x 900 =
20 x 70 x 100 =	30 x 500 x 100 =

Name: _____



Multiplying by 1-Digit Numbers

58 X 3	71 X 8	84 X 7
63 X 9	25 X 6	34 X 7
92 X 8	43 X 6	97 X 6



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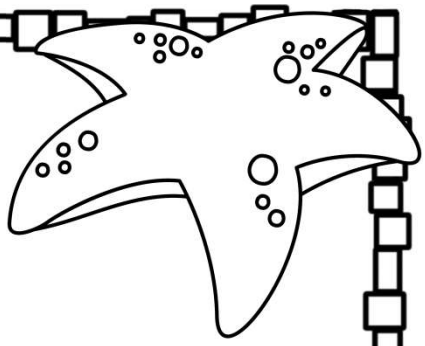
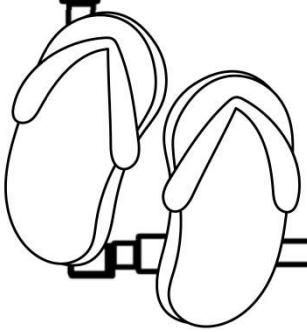


Multiplying Bigger Numbers

27 X 28	64 X 33	49 X 17
473 X 19	791 X 86	921 X 45
537 X 24	246 X 72	981 X 26



Name: _____

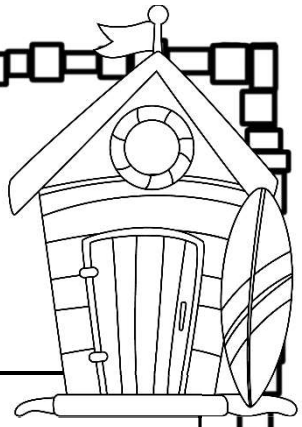
Dividing Multiples of 10 and 100

36 ÷ 6 =	360 ÷ 6 =	3,600 ÷ 6 =
56 ÷ 7 =	560 ÷ 7 =	5,600 ÷ 7 =
25 ÷ 5 =	250 ÷ 5 =	2,500 ÷ 5 =
24 ÷ 6 =	240 ÷ 6 =	2,400 ÷ 6 =
81 ÷ 9 =	810 ÷ 9 =	8,100 ÷ 9 =
64 ÷ 8 =	640 ÷ 8 =	6,400 ÷ 8 =
42 ÷ 6 =	420 ÷ 6 =	4,200 ÷ 6 =

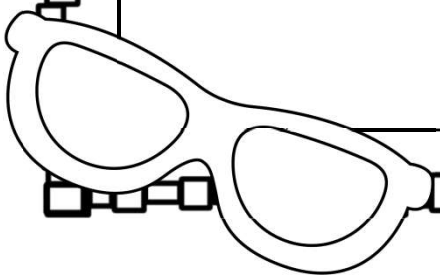
Name: _____

Division Practice

Directions: Write the answer to each problem.
You might need to rewrite the problem first.

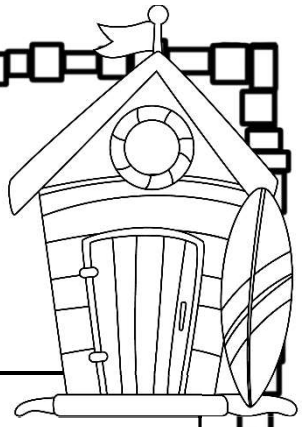


955 ÷ 8 =	249 ÷ 7 =
365 ÷ 5 =	448 ÷ 8 =
499 ÷ 2 =	396 ÷ 6 =
362 ÷ 5 =	425 ÷ 9 =



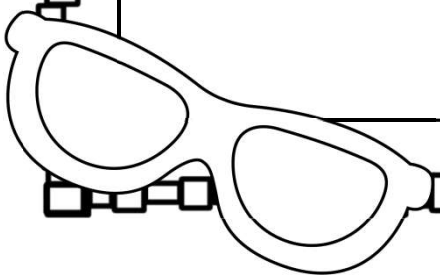
Name: _____

2-Digit Quotients



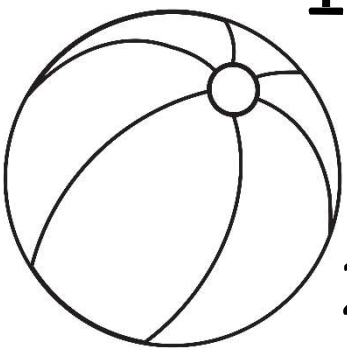
Directions: Write the answer to each problem.
You might need to rewrite the problem first.

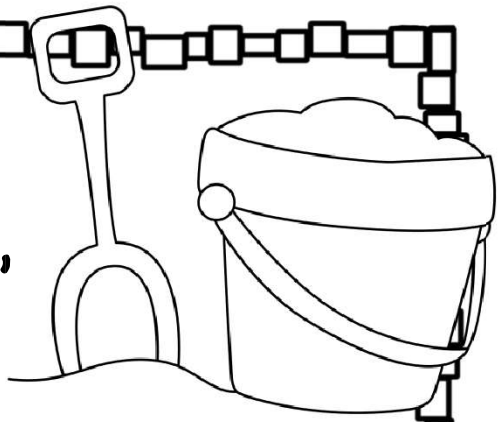
413 ÷ 14 =	768 ÷ 35 =
942 ÷ 45 =	503 ÷ 26 =
401 ÷ 19 =	634 ÷ 29 =



Name: _____

Multiplying Decimals by 10, 100 or 1,000





6.1 x 10 = _____

26.98 x 100 = _____

14.82 x 1,000 = _____

66.7 x 1,000 = _____

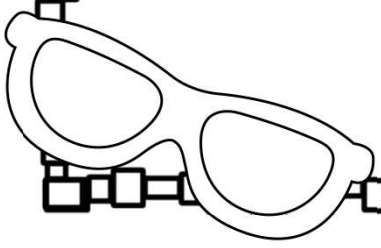
4.8 x 100 = _____

3.05 x 1,000 = _____

.002 x 100= _____

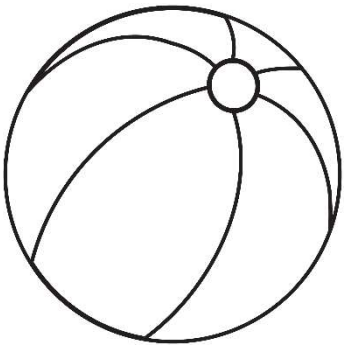
2.06 x 100 = _____

.37 x 1,000 = _____



Name: _____

Dividing Decimals by 10, 100 or 1,000



85.6 ÷ 10 = _____

1.99 ÷ 100 = _____

328.54 ÷ 1,000 = _____

942.64 ÷ 100= _____

0.834 ÷ 100= _____

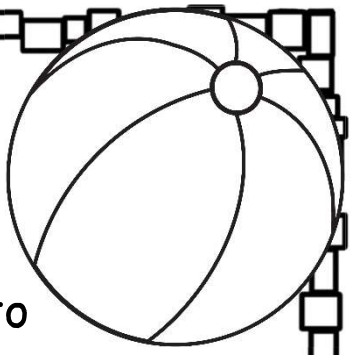
1.25 ÷ 10 = _____

.32 ÷ 10 = _____

78.21 ÷ 100 = _____

75.34 ÷ 1,000 = _____

Name: _____



Simplifying Expressions

Directions: Use the order of operations to simplify each expression.

(12 x 4) ÷ 10	
(16÷4) + (10-4)	
27 - (5x3)	
(4 x 6) ÷ 6 + 6	
(36÷6) x 4	
(4+3) x (9-2)	
32 ÷ (4 + 4)	
3 x 9 – 4	

Name: _____

Writing Rules

Directions: Find the missing numbers in each table. Write a rule for each table.

Rule: _____

s	2	3	4	5
	14	21	28	

Rule: _____

r	3	8	10	16
	60	160		

Rule: _____

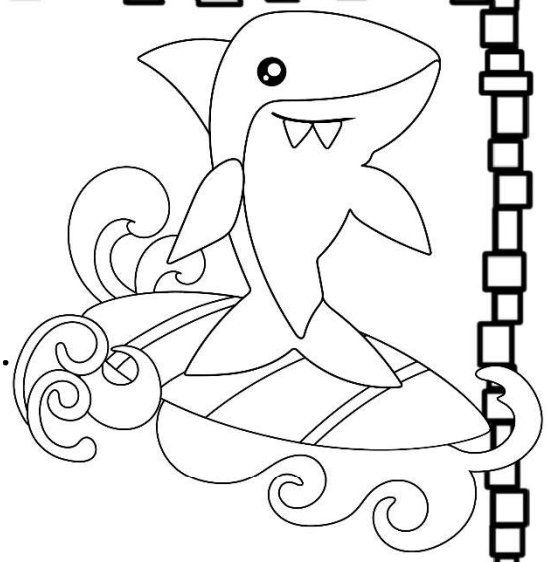
z	6	7	8	9
	54		72	

Rule: _____

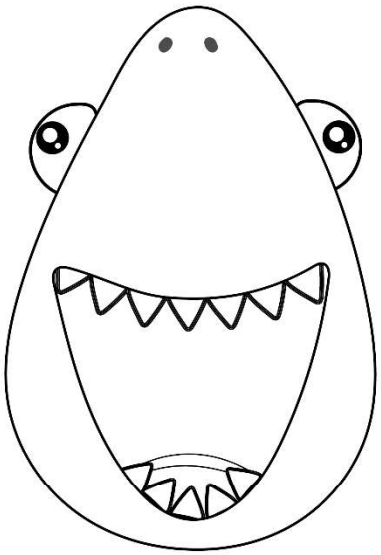
b	64	48	32	24
	8	6		

Name: _____

Equivalent Fractions



Directions:
Write an equivalent fraction for each.

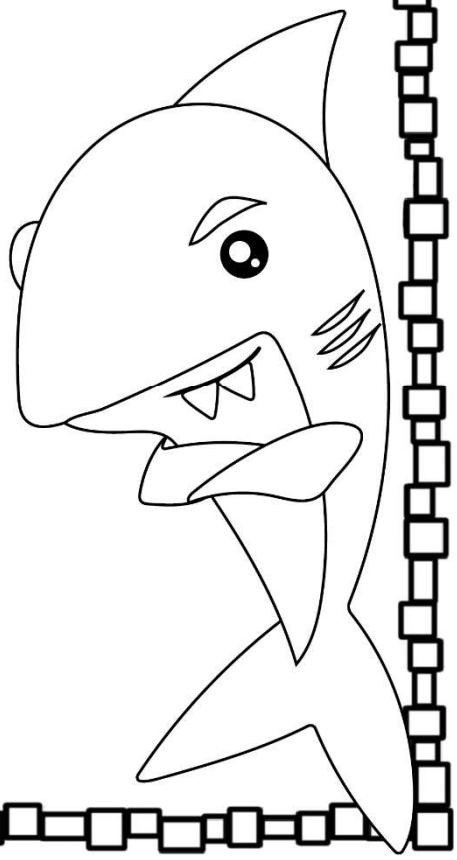


$\frac{6}{10} =$

$\frac{7}{9} =$

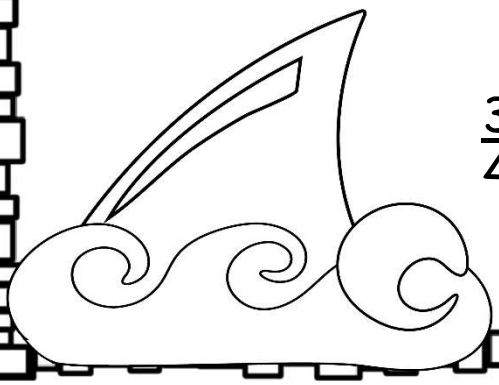
$\frac{4}{6} =$

$\frac{2}{5} =$



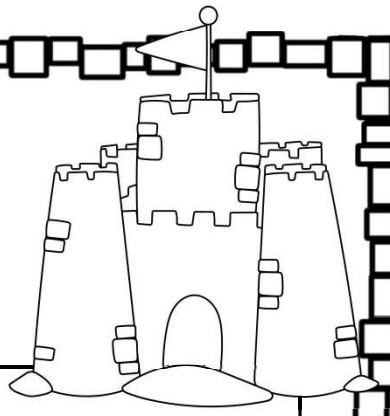
$\frac{18}{32} =$

$\frac{32}{48} =$



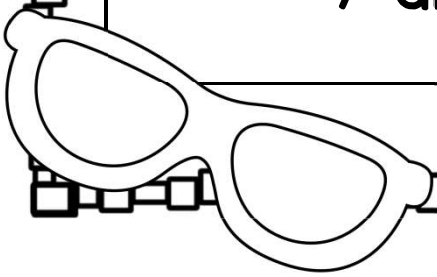
Name: _____

Multiples



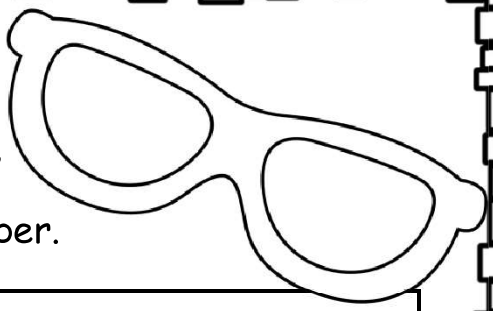
Directions: List the Least Common Multiple.

8 and 12	24
5 and 8	
6 and 7	
2 and 9	
4 and 7	
6 and 12	
7 and 10	



Name: _____

Factor Check

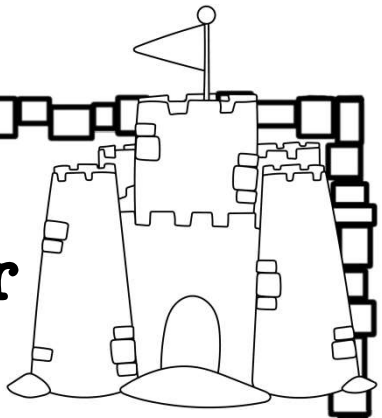


Directions: List the factors for each number.

16	1, 2, 4, 8, 16
21	
28	
32	
42	
56	
64	

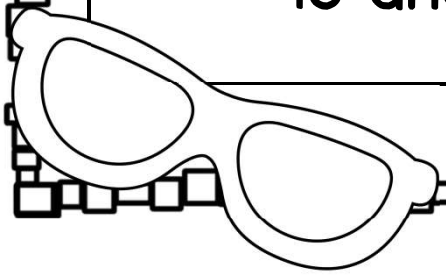
Name: _____

Greatest Common Factor



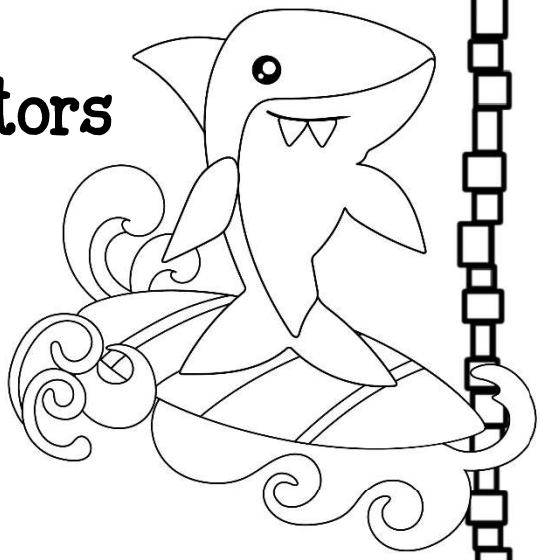
Directions: Find the GCF for each set of numbers.

16 and 40	8
10 and 90	
4 and 20	
14 and 28	
36 and 42	
36 and 63	
18 and 30	

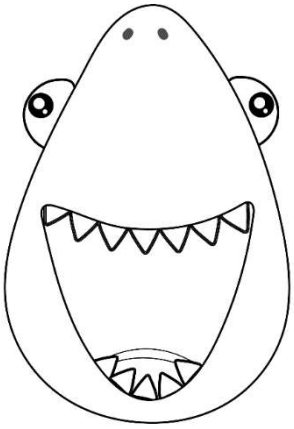


Name: _____

Finding Common Denominators



Directions:
Find a common denominator for each pair of fractions.



$\frac{4}{7}$ and $\frac{7}{8}$ =

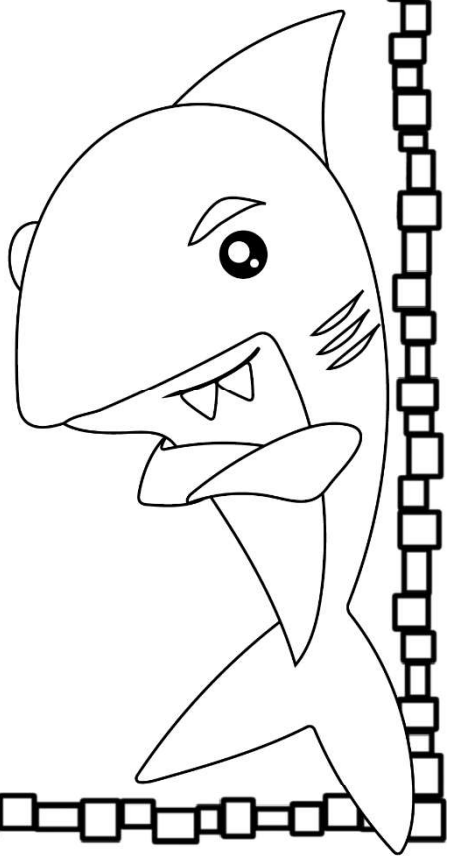
$\frac{2}{9}$ and $\frac{1}{3}$ =

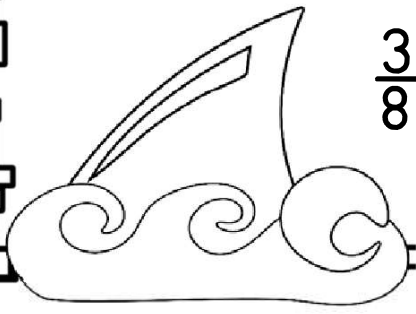
$\frac{7}{10}$ and $\frac{1}{7}$ =

$\frac{1}{2}$ and $\frac{4}{9}$ =

$\frac{6}{9}$ and $\frac{4}{5}$ =

$\frac{3}{8}$ and $\frac{1}{6}$ =

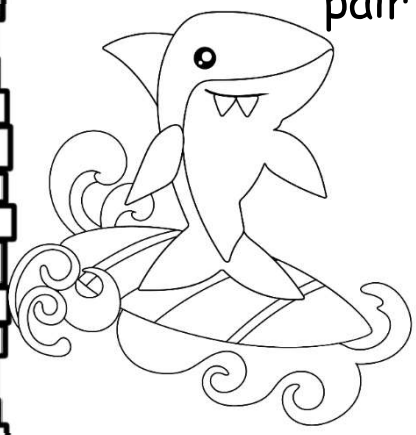




Name: _____

Adding & Subtracting with Unlike Denominators

Directions:
Find a common denominator for each pair of fractions then add or subtract.



$\frac{2}{9} + \frac{1}{2} =$

$\frac{1}{10} + \frac{3}{4} =$

$\frac{7}{10} - \frac{1}{8} =$

$\frac{1}{2} + \frac{2}{9} =$

$\frac{6}{9} - \frac{3}{10} =$

$\frac{3}{8} - \frac{1}{6} =$

Name: _____

Write each improper fraction as a whole number or mixed number in simplest form.

$\frac{24}{14}$ =

$\frac{66}{20}$ =

$\frac{30}{20}$ =

$\frac{12}{5}$ =

$\frac{47}{9}$ =

$\frac{52}{7}$ =

Name: _____

Word Problem Practice

Karen was at the party for 3 hours. She skated for $\frac{1}{3}$ of the party. How long did she skate?

Nathan collected 792 books to donate to the school. $\frac{2}{3}$ of the books were fiction and $\frac{1}{3}$ of the books with informational text. How many of each did he donate?

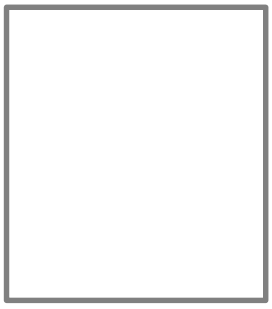
Hadley donated 930 coins to the fundraiser. $\frac{1}{5}$ of the coins were nickels and $\frac{4}{5}$ of the coins were pennies. How many of each did she donate?

Name: _____

Finding the perimeter and area.

Directions: Determine the perimeter and area of each shape.

4.2 in



6.1 in

The perimeter is:

The area is:

16.2 m

3.6 m

The perimeter is:

The area is:

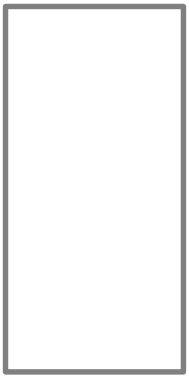
12.6 mm

7.3 mm

The perimeter is:

The area is:

6.9 cm



15.3 cm

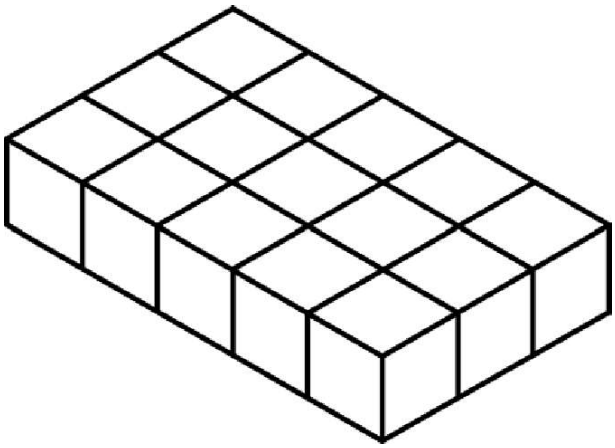
The perimeter is:

The area is:

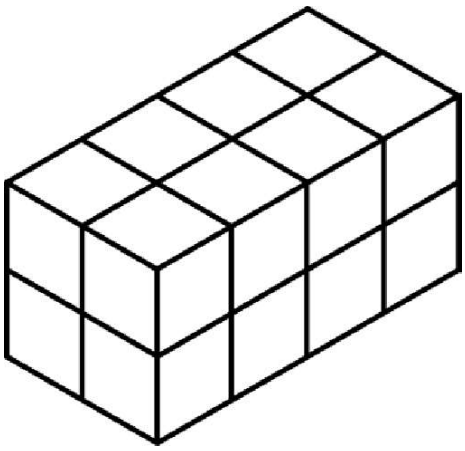
Name: _____

Finding the Volume

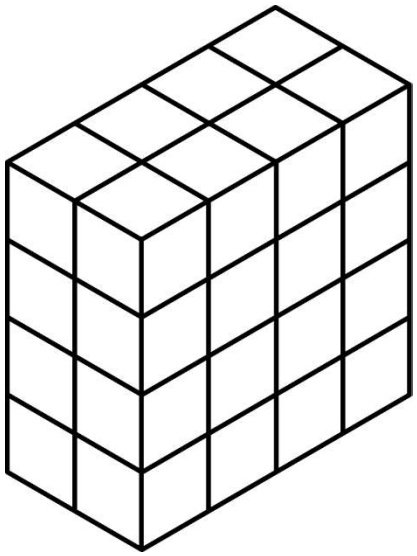
Directions: Find the volume in cubic units.



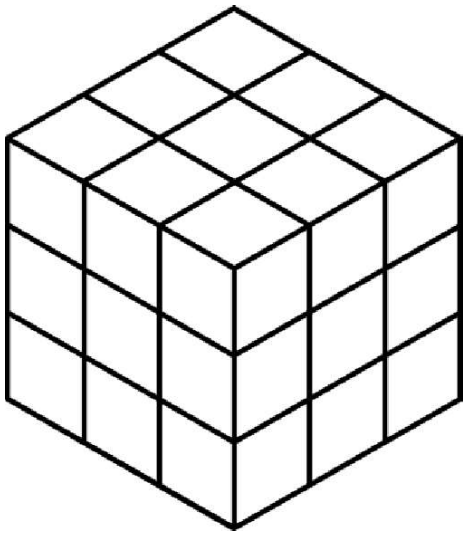
The area is: _____



The area is: _____



The area is: _____

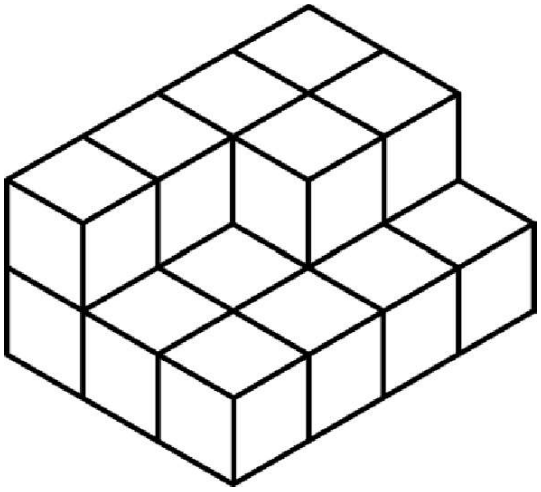


The area is: _____

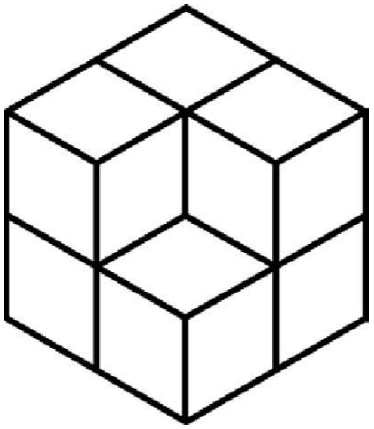
Name: _____

Finding the Volume

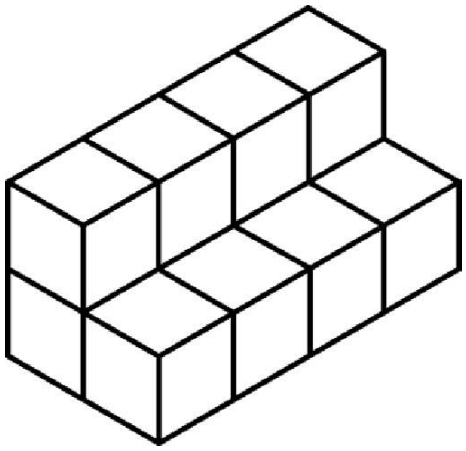
Directions: Find the volume in cubic units.



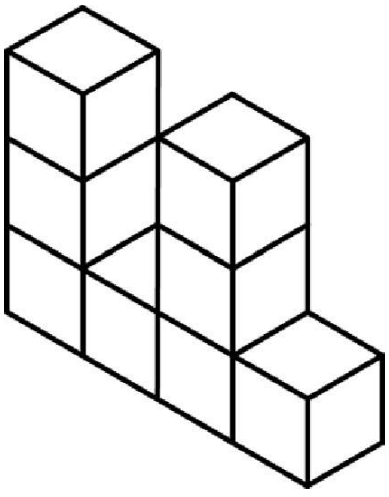
The area is: _____



The area is: _____



The area is: _____



The area is: _____

Name: _____

Converting Measurements

Directions: Convert each unit.

6 ft = in.	30 ft = yd.
12 yd = in.	5 ½ ft = in.
108 in. = ft	72 in. = yd
42 in. = ft	6 ft. = yd

Name: _____

Money Word Problems

Directions: Solve each problem.

Trevor bought 3 donuts for .79 each and a drink for .89. How much change did he get if he paid with $5.00?

_____

Cookies were 3 for .98. Kalyn bought 9. He had a $10 bill. How much did he have left?

_____

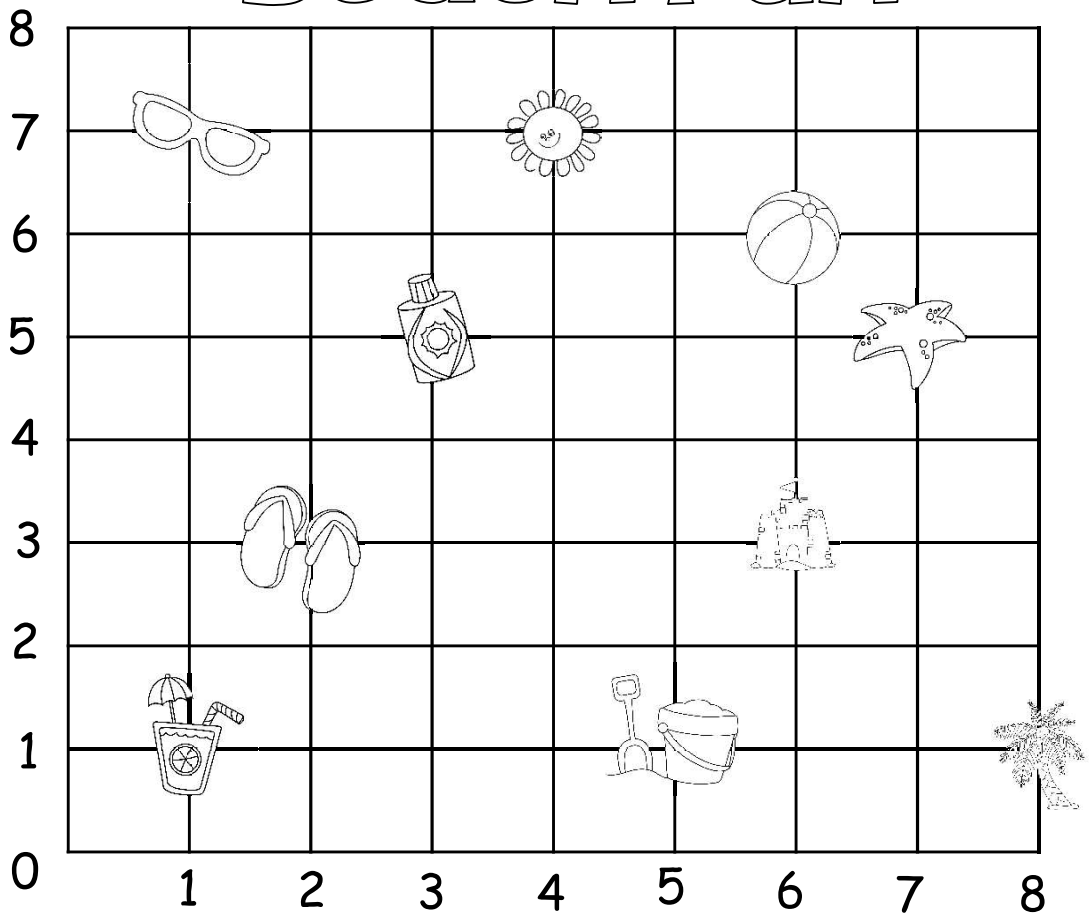
Stephen bought tickets for the carnival. They were 10 for $9. He needed 4 to go on a ride. If he wanted to go on 5 rides, how many did he need to buy? How much did he spend?

_____

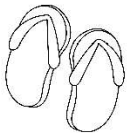
Rickie had $20 to spend at the movies. He bought a ticket for $7.25. His popcorn was $4.19 and his drink was $3.74. How much did he have left for candy?

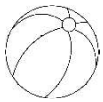
_____

Ordered Pairs
Beach Fun

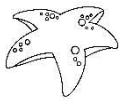


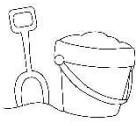
Identify the location of each picture by writing the ordered pair.

1.  = (____, ____)

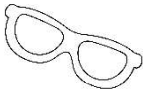
2.  = (____, ____)

3.  = (____, ____)

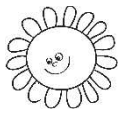
4.  = (____, ____)

5.  = (____, ____)

6.  = (____, ____)

7.  = (____, ____)

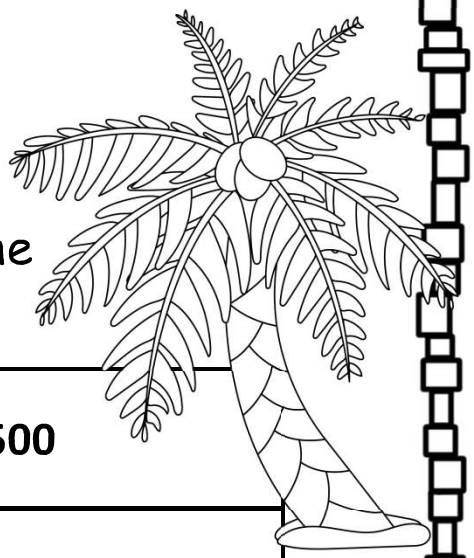
8.  = (____, ____)

9.  = (____, ____)

10.  = (____, ____)

ANSWER KEY

Rounding Numbers

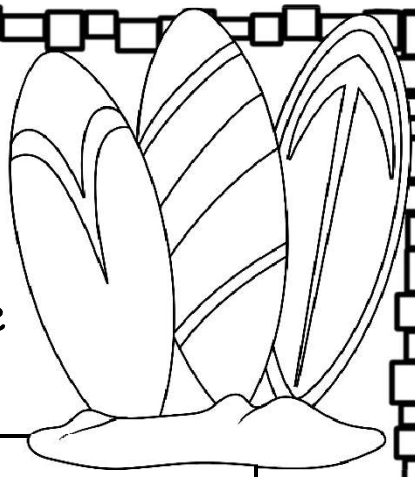


Directions: Round each number to the place of the underlined digit.

6,<u>4</u>82	**6,500**
<u>8</u>,205	**8,000**
48,<u>0</u>18	**48,000**
32,9<u>0</u>5	**32,900**
<u>5</u>1,103	**50,000**
8<u>5</u>,828	**86,000**
6<u>1</u>8,242	**620,000**
<u>2</u>87,065	**300,000**
4,927,<u>4</u>71	**4,927,500**
165,<u>0</u>98,748	**165,100,000**

ANSWER KEY

Rounding Numbers



Directions: Round each number to the place of the underlined digit.

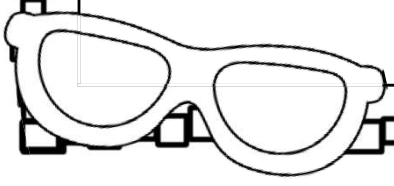
42.0<u>4</u>8	**42.05**
<u>8</u>,205	**8,000**
48,<u>0</u>18	**48,000**
72.3<u>0</u>5	**72.31**
<u>5</u>7.18	**60**
2<u>5</u>.88	**26**
3<u>1</u>8.46	**320**
87,0<u>6</u>7	**87,070**
8,327.<u>4</u>72	**8,327.5**
235,075.<u>2</u>05	**235,07.2**

ANSWER KEY

Expanded Form

Directions: Write each number in expanded form.

824,928	800,000 + 20,000 + 4,000 + 900 + 20 + 8
297,390	200,000 + 90,000 + 7,000 + 300 + 90
148,027	100,000 + 40,000 + 8,000 + 20 +7
2,598,184	2,000,000 + 500,000 + 90,000 + 8,000 + 100 + 80 + 4
3,027,476	3,000,000 + 20,000 + 7,000 + 400 + 70 + 6
7,198,275	7,000,000 + 100,000 + 90,000 + 8,000 + 200 + 70 + 5

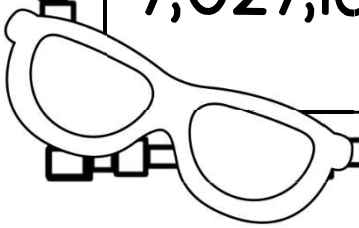


ANSWER KEY

Word Form

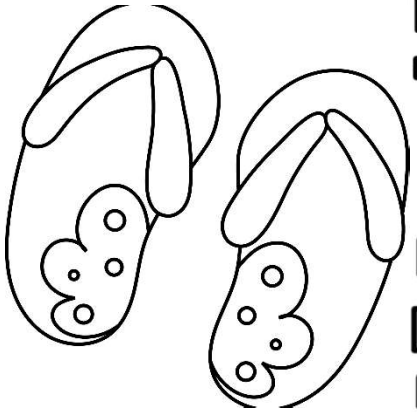
Directions: Write each number in word form.

42,485	forty-two thousand, four hundred eighty-five
20,975	twenty thousand, nine hundred seventy-five
37,021	thirty-seven thousand, twenty-one
5,298,285	five million, two hundred ninety-eight thousand, two hundred eighty-five
4,170,782	four million, one hundred seventy thousand, seven hundred eighty-two
7,027,169	seven million, twenty-seven thousand, one hundred sixty-nine



ANSWER KEY

Ordering Numbers



Directions: Write the numbers in order from least to greatest.

4.291	4.295	4.627	4.023

4,023, 4,291, 4,295, 4.627

2.779	2.6003	2.098	2.146

2.098, 2.146, 2.6003, 2.779

19.071	19.08	19.1	19.01

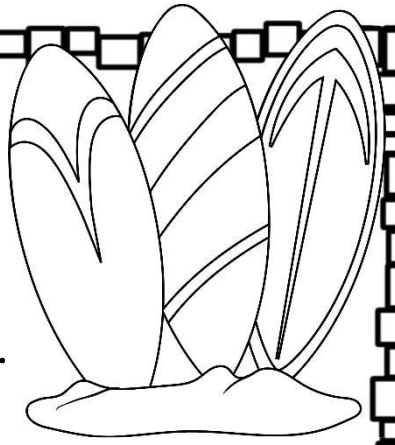
19.01, 19.071, 19.08, 19.1

254.9	25.4	2,548	2.085

2.085, 25.4, 24.9, 2,548

ANSWER KEY

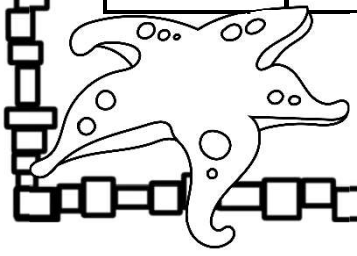
Use >, < or =



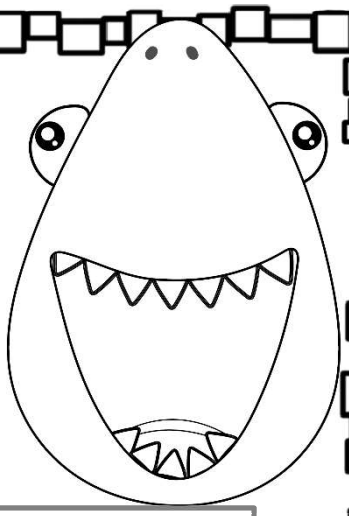
Directions: Compare each set of numbers. Use the correct sign.

3.928	>	3.902
6.303	=	6.303
24.94	<	29.94
30.75	>	30.57
71.02	=	71.02
85.21	>	80.27

5.822	>	8.522
3.077	<	3.700
60.45	>	40.65
1.179	<	1.917
12.01	>	12.00
16.77	<	17.67



ANSWER KEY



Ordering Decimals

Directions: Write the numbers in order from least to greatest.

1.36, 1.3, 1.63, 1.03

1.03. 1.3, 1.36, 1.63

0.3, 0.13, 0.19, 0.31

.13, .19, .3, .31

6.46, 6.41, 4.06, 4.6

4.06, 4.6, 6.41, 6.46

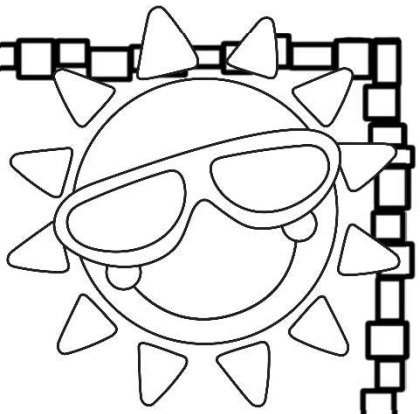
0.42, 3.74, 4.2, 3.47

.42, 3.47, 3.74, 4.2

ANSWER KEY

Multi-Step Word Problems

Solving word problems.



Kendra has a ten-dollar bill, a twenty-dollar bill and a five-dollar bill. She bought a shirt for $18.49. How much money does she have left?

$16.51

Tyson is going to the movies. He has two five-dollar bills and a ten-dollar bill. His ticket is $7.25. He buys a popcorn for $4.50 and a drink for $3.75. How much money does he have left?

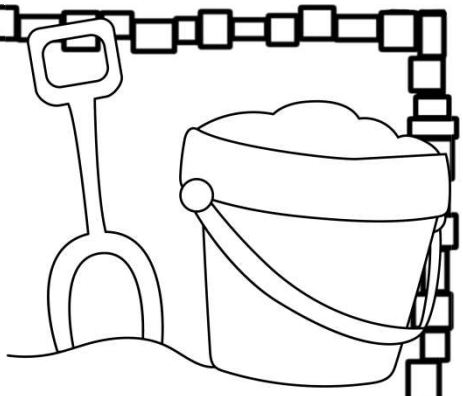
$4.50

Lexie earned $20 mowing her yard and $15 mowing her neighbor's yard. She is saving money to buy a new game that costs $42.99. How much more money does she need to earn?

$7.99

ANSWER KEY

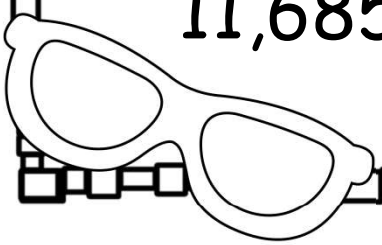
Addition & Subtraction



5,359	24,783	70,524
+6,326	-21,495	+46,509
11,685	3,288	117,003

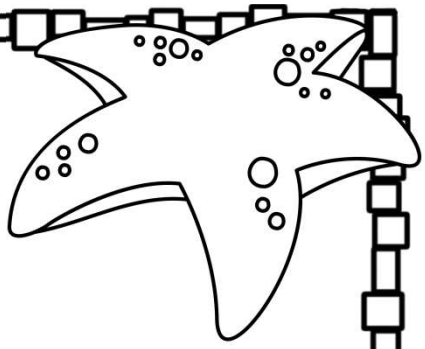
68,900	64,704	758,930
-11,182	+24,756	-479,672
57,718	89,460	279,258

67	735	1,682
93	846	7,842
+62	+265	+3,275
11,685	11,685	11,685



ANSWER KEY

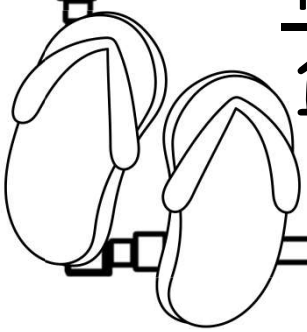
Addition & Subtraction of Decimals



3.486	8.365	5.703
+6.322	-4.835	+6.843
9.808	3.53	12.546

37.457	47.756	578.246
-24.846	+24.757	-244.255
12.611	72.513	333.991

2.5	78.2	45.07
7.4	67.9	37.76
+4.8	+24.4	+21.83
14.7	170.5	104.66



ANSWER KEY

Using Mental Math to Multiply

80 x 90 = 7,200	30 x 9 = 270
40 x 60 = 2,400	20 x 800 =16,000
80 x 7,000 = 560,000	20 x 600 = 12,000
50 x 800 = 40,000	60 x 300 = 18,000
70 x 400 = 28,000	1,200 x 80 = 96,000
6,000 x 500 = 3,000,000	4,000 x 900 = 3,600,000
20 x 70 x 100 = 140,000	30 x 500 x 100 = 1,500,000

ANSWER KEY

Multiplying by 1-Digit Numbers

58	71	84
X 3	X 8	X 7
174	568	588
63	25	34
X 9	X 6	X 7
567	150	238
92	43	97
X 8	X 6	X 6
736	258	582

ANSWER KEY

Multiplying Bigger Numbers

27 X 28 = 756	64 X 33 = 2,112	49 X 17 = 833
473 X 19 = 8,987	791 X 86 = 68,026	921 X 45 = 833
537 X 24 = 12,888	246 X 72 = 17,712	981 X 26 = 2,548

ANSWER KEY

Dividing Multiples of 10 and 100

36 ÷ 6 = 6	360 ÷ 6 = 60	3,600 ÷ 6 = 600
56 ÷ 7 = 8	560 ÷ 7 = 80	5,600 ÷ 7 = 800
25 ÷ 5 = 5	250 ÷ 5 = 50	2,500 ÷ 5 = 500
24 ÷ 6 = 4	240 ÷ 6 = 40	2,400 ÷ 6 = 400
81 ÷ 9 = 9	810 ÷ 9 = 90	8,100 ÷ 9 = 900
64 ÷ 8 = 8	640 ÷ 8 = 80	6,400 ÷ 8 = 800
42 ÷ 6 = 7	420 ÷ 6 = 70	4,200 ÷ 6 = 700

ANSWER KEY

Division Practice

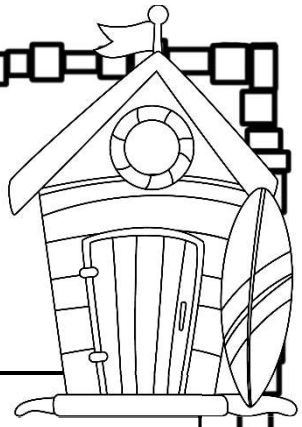
Directions: Write the answer to each problem.
You might need to rewrite the problem first.

955 ÷ 8 = $119\frac{3}{8}$	249 ÷ 7 = $35\frac{4}{7}$
365 ÷ 5 = 73	448 ÷ 8 = 56
499 ÷ 2 = $249\frac{1}{2}$	396 ÷ 6 = 66
362 ÷ 5 = $72\frac{2}{5}$	425 ÷ 9 = $47\frac{2}{9}$

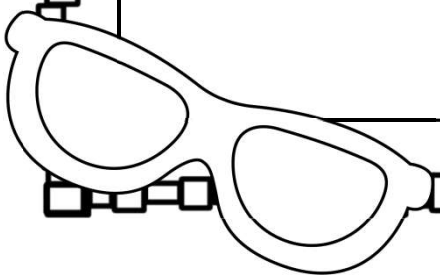
ANSWER KEY

2-Digit Quotients

Directions: Write the answer to each problem.
You might need to rewrite the problem first.

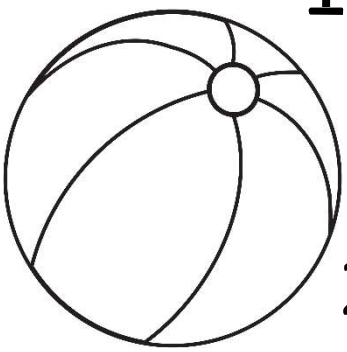


413 ÷ 14 = $29\frac{7}{14}$	768 ÷ 35 = $119\frac{3}{8}$
942 ÷ 45 = $20\frac{42}{45}$	503 ÷ 26 = $19\frac{9}{26}$
401 ÷ 19 = $21\frac{2}{19}$	634 ÷ 29 = $21\frac{25}{29}$



ANSWER KEY

Multiplying Decimals by 10, 100 or 1,000



6.1 x 10 = 61

26.98 x 100 = 2,698

14.82 x 1,000 = 14,820

66.7 x 1,000 = 66,700

4.8 x 100 = 480

3.05 x 1,000 = 3,050

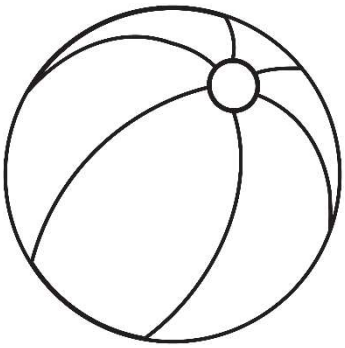
.002 x 100= .2

2.06 x 100 = 206

.37 x 1,000 = 370

ANSWER KEY

Dividing Decimals by 10, 100 or 1,000



85.6 ÷ 10 = 8.56

1.99 ÷ 100 = 199

328.54 ÷ 1,000 = 32,854

942.64 ÷ 100 = 94,264

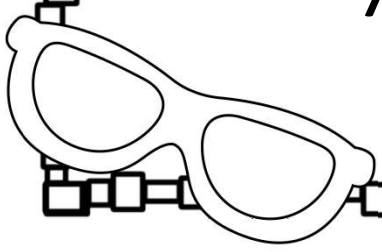
0.834 ÷ 100 = 83.4

1.25 ÷ 10 = 12.5

.32 ÷ 10 = 3.2

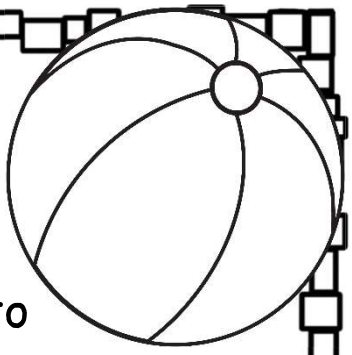
78.21 ÷ 100 = 7,821

75.34 ÷ 1,000 = 75,340



ANSWER KEY

Simplifying Expressions



Directions: Use the order of operations to simplify each expression.

(12 x 4) ÷ 10	4
(16÷4) + (10-4)	10
27 - (5x3)	12
(4 x 6) ÷ 6 + 6	10
(36÷6) x 4	24
(4+3) x (9-2)	49
32 ÷ (4 + 4)	4
3 x 9 – 4	23

ANSWER KEY

Writing Rules

Directions: Find the missing numbers in each table. Write a rule for each table.

Rule: multiply by 7

s	2	3	4	5
	14	21	28	35

Rule: multiply by 20

r	3	8	10	16
	60	160	200	320

Rule: multiply by 9

z	6	7	8	9
	54	63	72	81

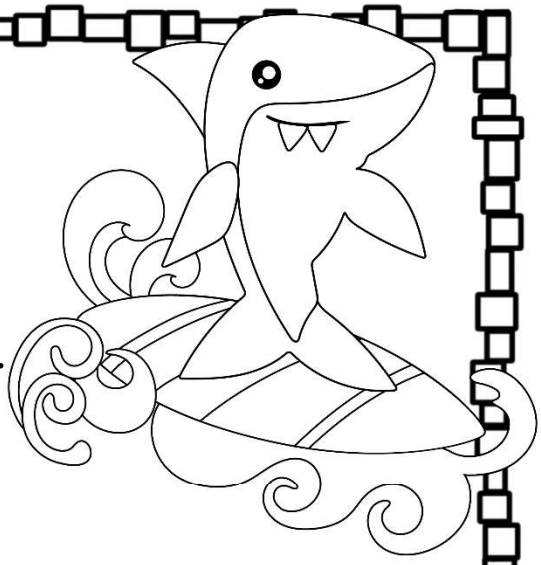
Rule: divide by 8

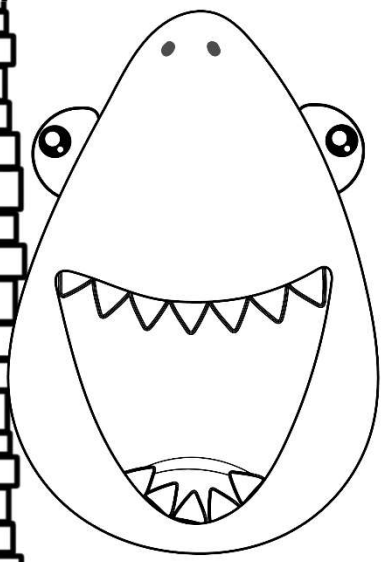
b	64	48	32	24
	8	6	4	3

ANSWER KEY

Equivalent Fractions

Directions:
Write an equivalent fraction for each.





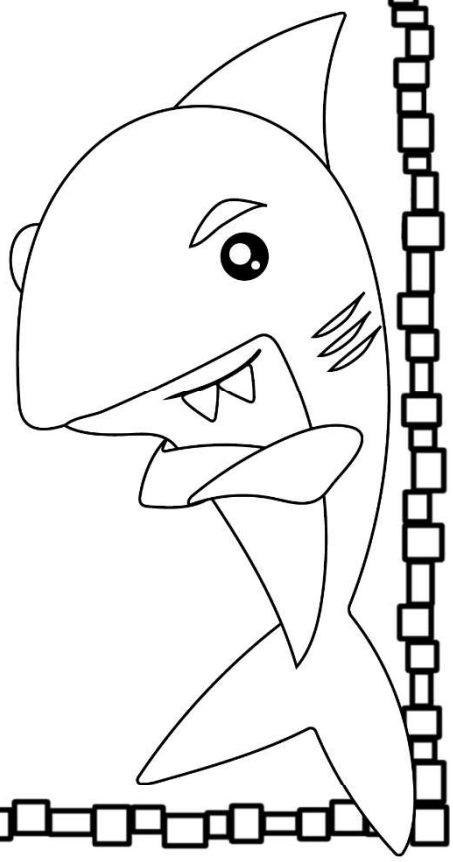
$\frac{6}{10} = \frac{3}{5}$

Possible answers are listed

$\frac{7}{9} = \frac{14}{18}$

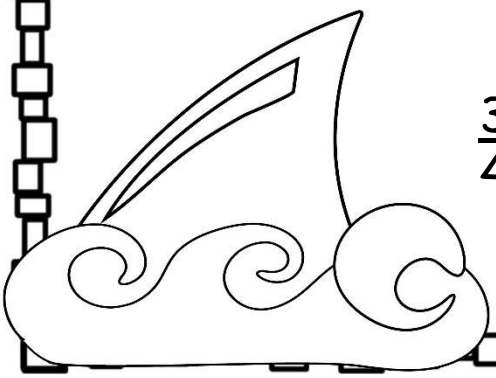
$\frac{4}{6} = \frac{8}{12}$

$\frac{2}{5} = \frac{4}{10}$



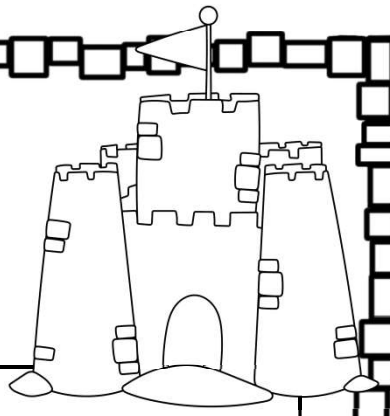
$\frac{18}{32} = \frac{9}{16}$

$\frac{32}{48} = \frac{16}{24}$



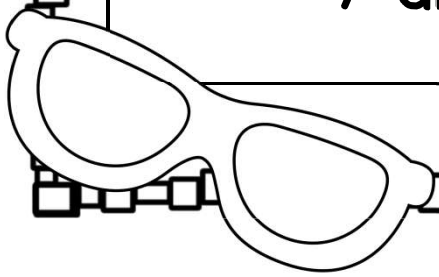
ANSWER KEY

Multiples



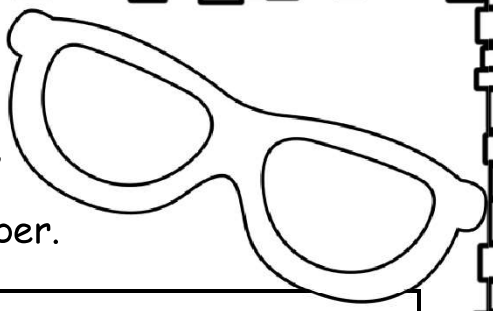
Directions: List the Least Common Multiple.

8 and 12	24
5 and 8	40
6 and 7	42
2 and 9	18
4 and 7	28
6 and 12	12
7 and 10	70



ANSWER KEY

Factor Check

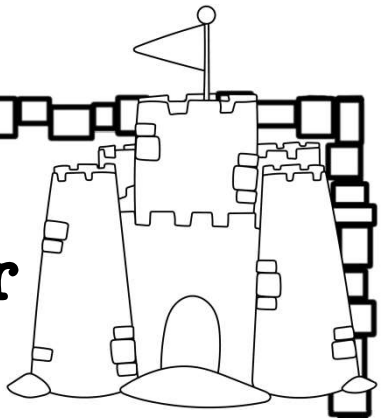


Directions: List the factors for each number.

16	1, 2, 4, 8, 16
21	1, 3, 7, 21
28	1, 2, 4, 7, 14, 28
32	1, 2, 4, 8, 16, 32
42	1, 2, 3, 6, 7, 14, 21, 42
56	1, 2, 4, 7, 8, 14, 28, 56
64	1, 2, 4, 8, 16, 32, 64

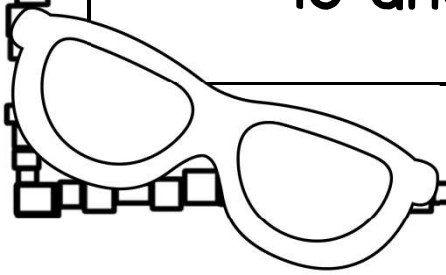
ANSWER KEY

Greatest Common Factor



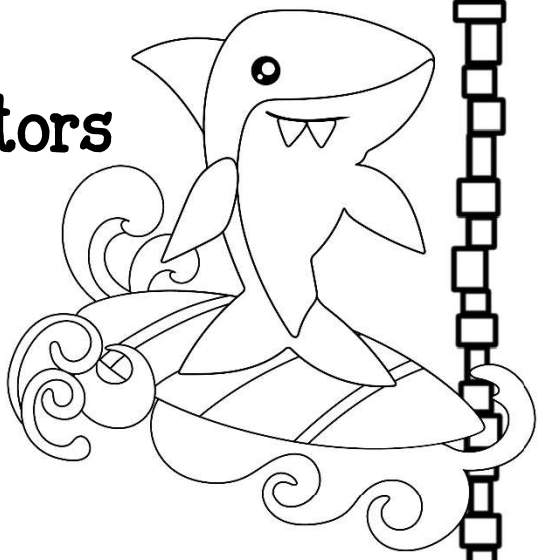
Directions: Find the GCF for each set of numbers.

16 and 40	8
10 and 90	10
4 and 20	4
14 and 28	14
36 and 42	6
36 and 63	9
18 and 30	6

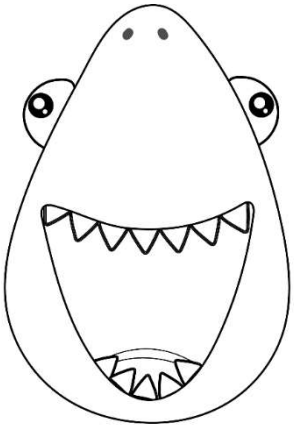


ANSWER KEY

Finding Common Denominators



Directions:
Find a common denominator for each pair of fractions.



$\frac{4}{7}$ and $\frac{7}{8}$ = 56

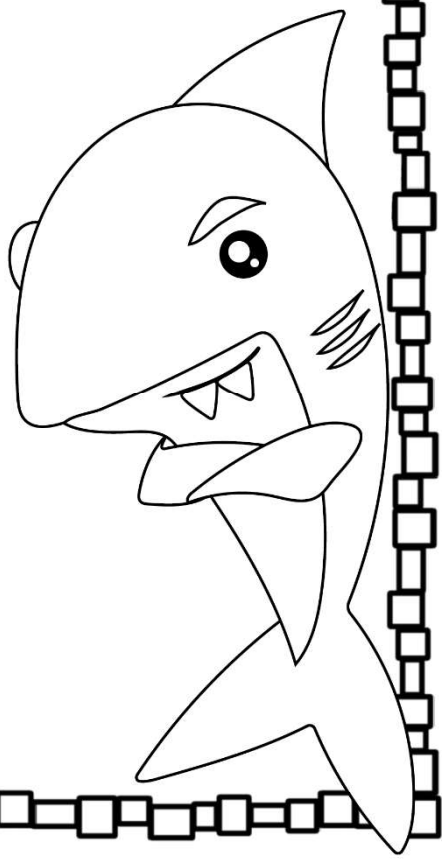
$\frac{2}{9}$ and $\frac{1}{3}$ = 9

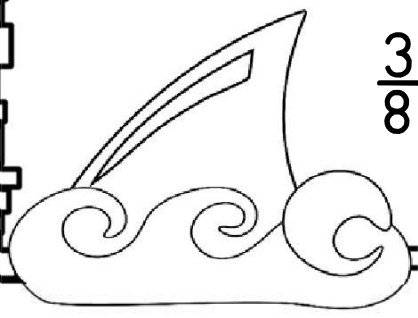
$\frac{7}{10}$ and $\frac{1}{7}$ = 70

$\frac{1}{2}$ and $\frac{4}{9}$ = 18

$\frac{6}{9}$ and $\frac{4}{5}$ = 45

$\frac{3}{8}$ and $\frac{1}{6}$ = 24

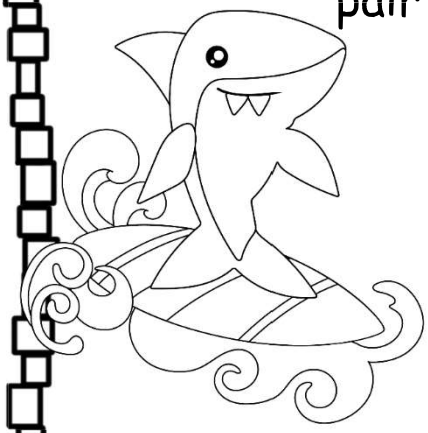




ANSWER KEY

Adding & Subtracting with Unlike Denominators

Directions:
Find a common denominator for each pair of fractions then add or subtract.



$\frac{2}{9} + \frac{1}{2} = \frac{4}{18} = \frac{2}{9}$

$\frac{1}{10} + \frac{3}{4} = \frac{17}{20}$

$\frac{7}{10} - \frac{1}{8} = \frac{23}{40}$

$\frac{1}{2} + \frac{2}{9} = \frac{13}{18}$

$\frac{6}{9} - \frac{3}{10} = \frac{11}{30}$

$\frac{3}{8} - \frac{1}{6} = \frac{5}{24}$

ANSWER KEY

Write each improper fraction as a whole number or mixed number in simplest form.

$\frac{24}{14} = 1\frac{5}{7}$

$\frac{66}{20} = 3\frac{3}{10}$

$\frac{30}{20} = 1\frac{10}{20}$

$\frac{12}{5} = 2\frac{2}{5}$

$\frac{47}{9} = 5\frac{2}{9}$

$\frac{52}{7} = 7\frac{3}{7}$

ANSWER KEY

Word Problem Practice

Karen was at the party for 3 hours. She skated for $\frac{1}{3}$ of the party. How long did she skate?

1 hour

Nathan collected 792 books to donate to the school. $\frac{2}{3}$ of the books were fiction and $\frac{1}{3}$ of the books with informational text. How many of each did he donate?

264 informational text
528 fiction

Hadley donated 930 coins to the fundraiser. $\frac{1}{5}$ of the coins were nickels and $\frac{4}{5}$ of the coins were pennies. How many of each did she donate?

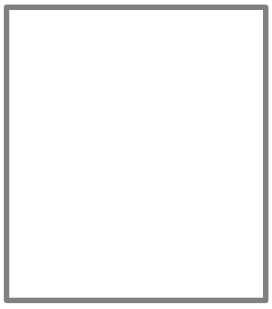
186 nickels
744 pennies

ANSWER KEY

Finding the perimeter and area.

Directions: Determine the perimeter and area of each shape.

4.2 in



6.1 in

The perimeter is:
20.6 in
The area is:
25.62 in^2

16.2 m

3.6 m

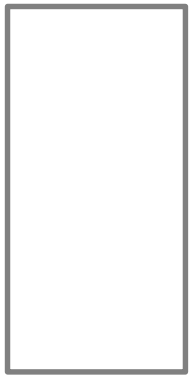
The perimeter is:
39.6 m
The area is:
58.32 m^2

12.6 mm

7.3 mm

The perimeter is:
39.8 mm
The area is:
91.98 mm^2

6.9 cm



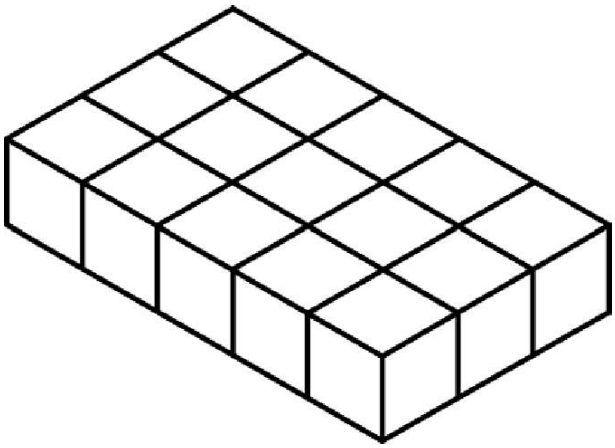
15.3 cm

The perimeter is:
44.4 cm
The area is:
105.57 cm^2

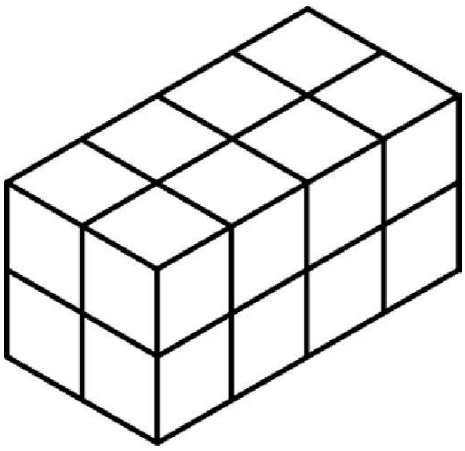
ANSWER KEY

Finding the Volume

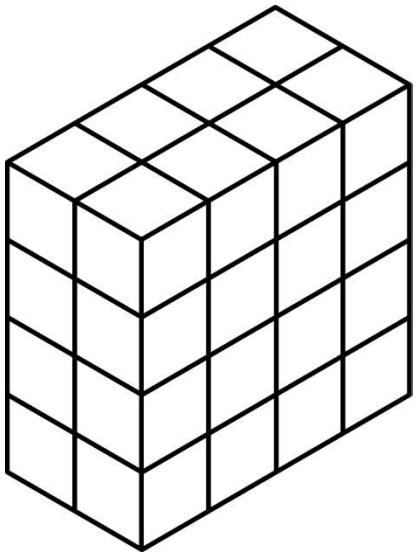
Directions: Find the volume in cubic units.



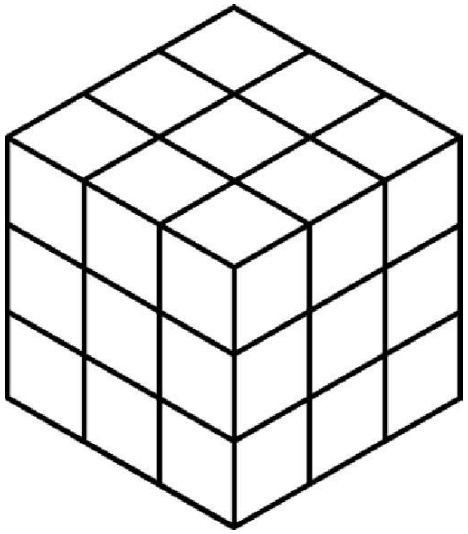
The area is:
15 cubic units



The area is:
16 cubic units



The area is:
32 cubic units

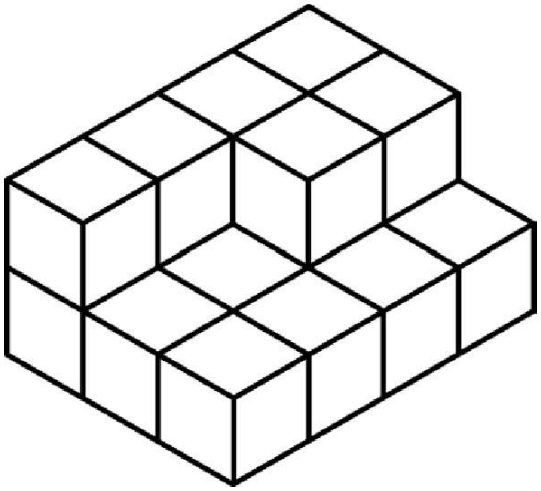


The area is:
27 cubic units

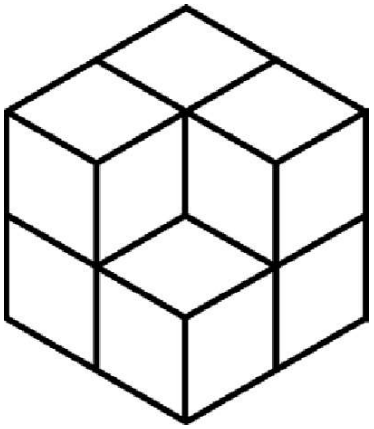
ANSWER KEY

Finding the Volume

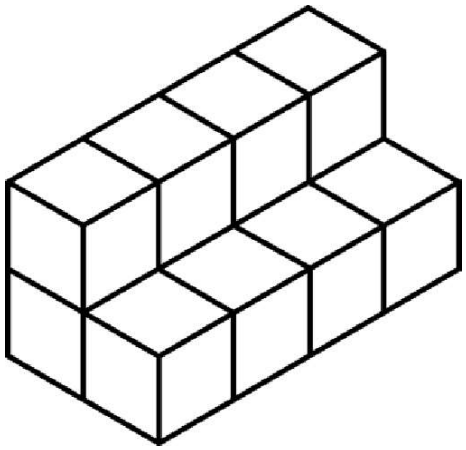
Directions: Find the volume in cubic units.



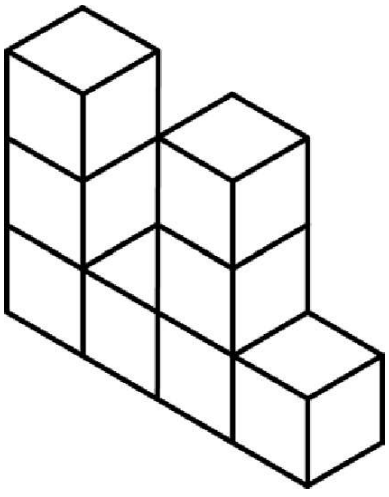
The area is:
18 cubic units



The area is:
7 cubic units



The area is:
12 cubic units



The area is:
8 cubic units

ANSWER KEY

Converting Measurements

Directions: Convert each unit.

6 ft = 72 in	30 ft = 10 yd
12 yd = 432 in	5 ½ ft = 66 in
108 in. = 9 ft	72 in. = 2 yd
42 in. = 3 ½ ft	6 ft. = 2 yd

ANSWER KEY

Money Word Problems

Directions: Solve each problem.

Trevor bought 3 donuts for .79 each and a drink for .89. How much change did he get if he paid with $5.00?

$1.74

Cookies were 3 for .98. Kalyn bought 9. He had a $10 bill. How much did he have left?

$7.06

Stephen bought tickets for the carnival. They were 10 for $9. He needed 4 to go on a ride. If he wanted to go on 5 rides, how many did he need to buy? How much did he spend?

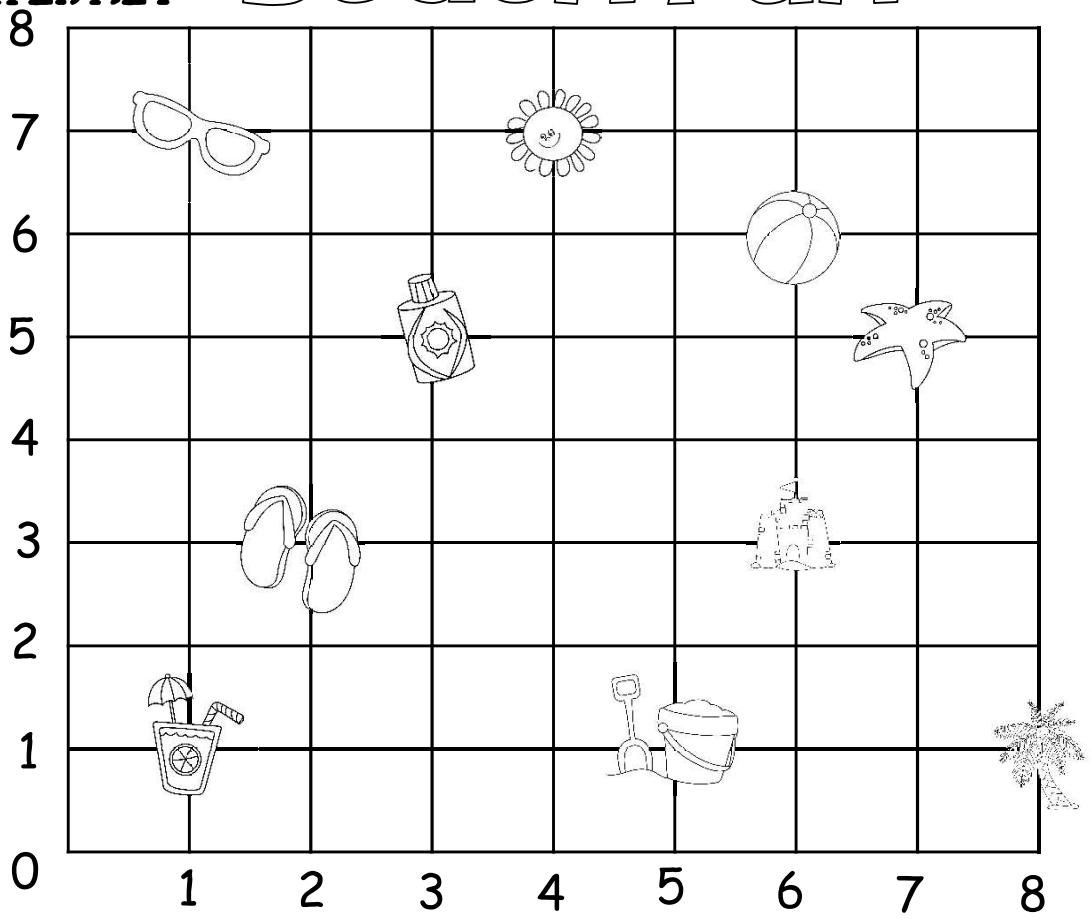
20 tickets
$18

Rickie had $20 to spend at the movies. He bought a ticket for $7.25. His popcorn was $4.19 and his drink was $3.74. How much did he have left for candy?

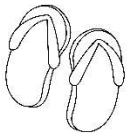
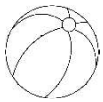
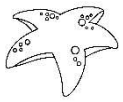
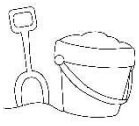
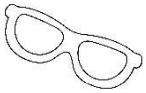
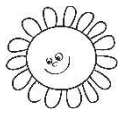
$4.82

Ordered Pairs
Beach Fun

ANSWER KEY



Identify the location of each picture by writing the ordered pair.

1.  = (2 , 3)
2.  = (6 , 6)
3.  = (1 , 1)
4.  = (7 , 5)
5.  = (5 , 1)
6.  = (6 , 3)
7.  = (1 , 7)
8.  = (8 , 1)
9.  = (4 , 7)
10.  = (3 , 5)

Cumulative Review 1

Section A

1. C
2. A
3. D

④ D

⑤ B

⑥ D

⑦ D

⑧ B

⑨ A

⑩ C

Section B

⑪ 5,000,000 + 20,000 + 9,000 + 700 + 30 + 6

⑫ 203,870

⑬

Score	Rubric
2	Student response includes each of the following 2 elements: Modeling component: The student shows correct use of division. Reasoning component: The student correctly identifies that Yuna was correct. Example: 115 ÷ 15 = 7 R 10 Yuna would need 1 more bag for the remaining 10 beads. Yuna would need 8 bags.
1	Student response includes 1 of the 2 elements.
0	Student response is incorrect or irrelevant.

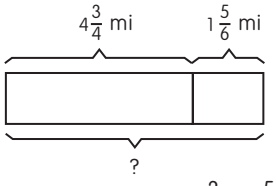
⑭ 230

⑮ 54

⑯

Score	Rubric
2	Student response includes each of the following 2 elements: Computation component: $\mathbf{\frac{3}{10}}$ Modeling component: The student shows correct use of multiplication. Example: $\frac{3}{5} \div 2 = \frac{1}{2} \times \frac{3}{5}$ $= \frac{3}{10}$
1	Student response includes 1 of the 2 elements. Or, the student has a computation error, but provides a valid strategy.
0	Student response is incorrect or irrelevant.

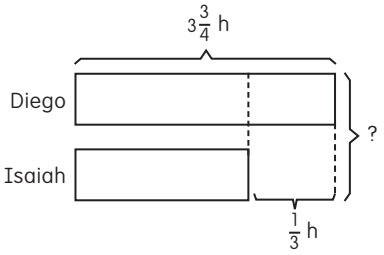
⑰

Score	Rubric
2	Student response includes each of the following 2 elements: Computation component: $\mathbf{6\frac{7}{12}}$ **mi** Modeling component: The student shows correct use of addition. Example:  Total distance $= 4\frac{3}{4} + 1\frac{5}{6}$ $= 4\frac{9}{12} + 1\frac{10}{12}$ $= 5\frac{19}{12}$ $= 6\frac{7}{12}$ mi
1	Student response includes 1 of the 2 elements. Or, the student has a computation error, but provides a valid strategy.
0	Student response is incorrect or irrelevant.

18

Score	Rubric
2	Student response includes each of the following 2 elements: Modeling component: The student shows correct use of addition and multiplication. Reasoning component: The student correctly identifies that Jackson has enough punch. Example: Total amount of punch $= 2\frac{5}{8} + 8\frac{2}{5}$ $= 2\frac{25}{40} + 8\frac{16}{40}$ $= 10\frac{41}{40}$ $= 11\frac{1}{40}$ L Total amount of punch required $= 40 \times \frac{1}{5}$ $= 8$ L Jackson has enough punch for the party.
1	Student response includes 1 of the 2 elements.
0	Student response is incorrect or irrelevant.

19

Score	Rubric
2	Student response includes each of the following 2 elements: Computation component: $\mathbf{7\frac{1}{6}}$ **h** Modeling component: The student shows correct use of addition and subtraction. Example:  $3\frac{3}{4} - \frac{1}{3} = 3\frac{9}{12} - \frac{4}{12}$ $= 3\frac{5}{12}$ Isaiah read his book in $3\frac{5}{12}$ hours. $3\frac{3}{4} + 3\frac{5}{12} = 3\frac{9}{12} + 3\frac{5}{12}$ $= 6\frac{14}{12}$ $= 7\frac{2}{12}$ $= 7\frac{1}{6}$ Diego and Isaiah spent $7\frac{1}{6}$ hours reading in all.
1	Student response includes 1 of the 2 elements. Or, the student has a computation error, but provides a valid strategy.
0	Student response is incorrect or irrelevant.

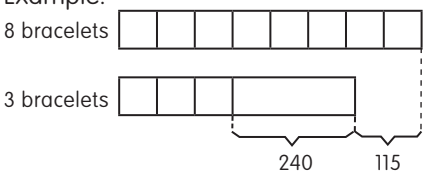
20

Score	Rubric
2	Student response includes each of the following 2 elements: Computation component: **20 m²** Modeling component: The student correctly multiplies two mixed numbers. Example: Area $= 9\frac{1}{3} \times 2\frac{1}{7}$ $= \frac{\overset{4}{\cancel{28}}}{\underset{1}{\cancel{3}}} \times \frac{\cancel{15}\,5}{\cancel{7}\,1}$ $= 20$ m²
1	Student response includes 1 of the 2 elements. Or, the student has a computation error, but provides a valid strategy.
0	Student response is incorrect or irrelevant.

Section C

21

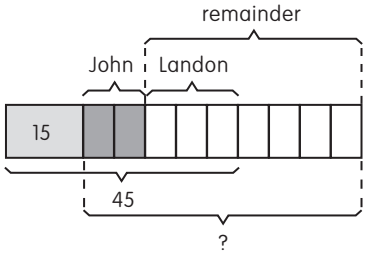
Score	Rubric
3	Student response includes each of the following 3 elements: Computation component: **453** Modeling component: The student shows correct work to find the number of beads on 1 bracelet. Modeling component: The student shows correct use of multiplication and addition.

	Example:  Number of beads on 5 bracelets = 240 + 115 = 355 Number of beads on 1 bracelet = 355 ÷ 5 = 71 Number of beads on 3 bracelets = 3 × 71 = 213 213 + 240 = 453 Zoe had 453 beads.
2	Student response includes 2 of the 3 elements. Or, the student has a computation error, but provides a valid strategy.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.

22

Score	Rubric
3	Student response includes each of the following 3 elements: Computation component: **256** Modeling component: The student shows correct work to find the fraction of the total number of cookies given away. Modeling component: The student shows correct work to find the number of cookies baked at first. Example: $1 - \frac{7}{8} = \frac{1}{8}$ $\frac{1}{8}$ of the cookies were chocolate cookies. $\frac{1}{2} \times \frac{7}{8} = \frac{7}{16}$ $\frac{5}{8} \times \frac{1}{8} = \frac{5}{64}$ $\frac{7}{16} + \frac{5}{64} = \frac{28}{64} + \frac{5}{64}$ $= \frac{33}{64}$ Liam gave away $\frac{33}{64}$ of his cookies. 33 units = 132 1 unit = 4 64 units = 4 × 64 = 256 Liam baked 256 cookies at first.
2	Student response includes 2 of the 3 elements. Or, the student has a computation error, but provides a valid strategy.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.

23

Score	Rubric
4	Student response includes each of the following 4 elements: Reasoning component: The student correctly identifies Zane's mistake. Computation component: **54** Modeling component: The student shows correct use of division. Modeling component: The student shows correct use of multiplication. Example: Zane is incorrect because he did not take into account the number of marbles Jack gave to John and to Landon.  45 – 15 = 30 5 units = 30 1 unit = 30 ÷ 5 = 6 9 units = 6 × 9 = 54 Jack had 54 marbles at first.
3	Student response includes 3 of the 4 elements. Or, the student has a computation error, but provides a valid strategy.

2	Student response includes 2 of the 4 elements.
1	Student response includes 1 of the 4 elements.
0	Student response is incorrect or irrelevant.

Cumulative Review 2

Section A

1. D
2. C
3. C
4. C
5. A
6. C
7. B
8. B and C

(9) B

(10) C

Section B

(11)

Score	Rubric
2	Student response includes each of the following 2 elements: Reasoning component: The student correctly identifies the least possible distance. Reasoning component: The student correctly identifies the greatest possible distance. Example: Least: 1.855 is 1.86 when rounded to the nearest hundredth. Greatest: 1.864 is 1.86 when rounded to the nearest hundredth.
1	Student response includes 1 of the 2 elements.
0	Student response is incorrect or irrelevant.

(12) 8.375

(13) 4.7

(14) 24.42

(15)

Score	Rubric
2	Student response includes each of the following 2 elements: Computation component: $\mathbf{9\frac{7}{8}}$ Modeling component: The student correctly expresses the mixed number in simplest form. Example: $9.875 = 9\frac{875}{1{,}000}$ $= 9\frac{7}{8}$
1	Student response includes 1 of the 2 elements. Or, the student has a computation error, but provides a valid strategy.
0	Student response is incorrect or irrelevant.

(16) 0.07

(17)

Score	Rubric
2	Student response includes each of the following 2 elements: Computation component: **54** Modeling component: The student correctly rounds to the nearest whole number and finds the product. Example: 27.18 is 27 when rounded to the nearest whole number. $27 \times 2 = 54$ 27.18×2 is about 54.
1	Student response includes 1 of the 2 elements. Or, the student has a computation error, but provides a valid strategy.
0	Student response is incorrect or irrelevant.

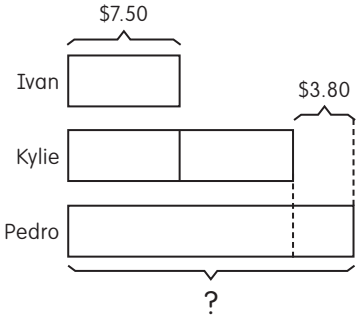
(18)

Score	Rubric
2	Student response includes each of the following 2 elements: Modeling component: The student shows correct use of multiplication and subtraction. Reasoning component: The student correctly identifies that Kevin was correct. Example: Cost of 7 melons = $7 \times \$2.75$ $= \$19.25$ Change received = $\$20 - \$19.25$ $= \$0.75$ So, Kevin was correct.
1	Student response includes 1 of the 2 elements.
0	Student response is incorrect or irrelevant.

19

Score	Rubric
2	Student response includes each of the following 2 elements: Modeling component: The student shows correct use of subtraction and addition. Reasoning component: The student correctly identifies that Sanjay does not have enough ribbon. Example: Length of shorter piece = 6.42 – 1.56 = 4.86 ft Total length of ribbon = 4.86 + 6.42 = 11.28 ft So, Sanjay does not have enough ribbon.
1	Student response includes 1 of the 2 elements.
0	Student response is incorrect or irrelevant.

20

Score	Rubric
2	Student response includes each of the following 2 elements: Computation component: **$18.80** Modeling component: The student shows correct use of multiplication and addition. Example:  $7.50 × 2 = $15 $15 + $3.80 = $18.80 Pedro saved $18.80.
1	Student response includes 1 of the 2 elements. Or, the student has a computation error, but provides a valid strategy.
0	Student response is incorrect or irrelevant.

Section C

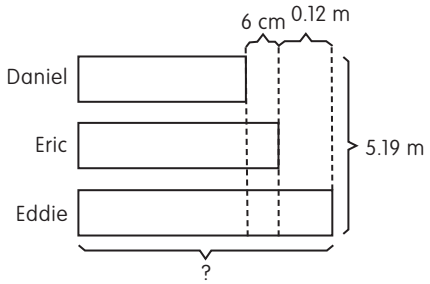
21

Score	Rubric
3	Student response includes each of the following 3 elements: Reasoning component: The student correctly identifies the error in Fátima's answer. Computation component: **3rd** Reasoning component: The student correctly orders the position of the athletes. Example: The athletes have not been ordered according to their race times. Fátima came in third.
2	Student response includes 2 of the 3 elements. Or, the student has a computation error, but provides a valid explanation.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.

Position	Athlete	Time (seconds)
1st	Daniella	14.498
2nd	Brianna	14.501
3rd	Fátima	14.975
4th	Carla	15.243
5th	Andrea	15.325
6th	Emilia	15.401

22

Score	Rubric
3	Student response includes each of the following 3 elements: Computation component: **1.83 m** Modeling component: The student shows correct use of subtraction and division. Modeling component: The student shows correct use of addition.

	Example:  6 cm = 0.06 m 3 units = 5.19 – 0.06 – 0.06 – 0.12 = 4.95 m 1 unit = 4.95 ÷ 3 = 1.65 m 1.65 + 0.06 + 0.12 = 1.83 m Eddie jumped 1.83 meters.
2	Student response includes 2 of the 3 elements.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.

23

Score	Rubric
4	Student response includes each of the following 4 elements: Computation component: **$0.90, $0.55** Modeling component: The student shows correct work to find the cost of 10 pears and 10 apples. Modeling component: The student shows correct work to find the cost of 4 pears and 4 apples. Modeling component: The student shows correct work to find the cost of 1 pear and the cost of 1 apple. Example: $6.90 + $7.60 = $14.50 10 pears and 10 apples cost $14.50. $14.50 ÷ 10 = $1.45 1 pear and 1 apple cost $1.45. 4 × $1.45 = $5.80 4 pears and 4 apples cost $5.80. $7.60 – $5.80 = $1.80 $1.80 ÷ 2 = $0.90 The cost of 1 pear is $0.90. $1.45 – $0.90 = $0.55 The cost of 1 apple is $0.55.
3	Student response includes 3 of the 4 elements.
2	Student response includes 2 of the 4 elements.
1	Student response includes 1 of the 4 elements.
0	Student response is incorrect or irrelevant.

Cumulative Review 3

Section A

1. C
2. C
3. C
4. D
5. **Part A:** A
   Part B: D
6. **Part A:** C
   Part B: B
7. A
8. D

Section B

9.

Score	Rubric
2	Student response includes each of the following 2 elements: Computation component: **216 in^3** Modeling component: The student shows correct use of formula to find the volume of the rectangular prism. Example: Volume of the rectangular prism $= 12 \times 6 \times 3$ $= 216$ in^3
1	Student response includes 1 of the 2 elements. Or, the student has a computation error, but provides a valid strategy.
0	Student response is incorrect or irrelevant.

10.

Score	Rubric
2	Student response includes each of the following 2 elements: Computation component: **8,000 ft^3** Modeling component: The student shows correct use of formula to find the volume of the cube. Example: Volume of the cube $= 20 \times 20 \times 20$ $= 8{,}000$ ft^3
1	Student response includes 1 of the 2 elements. Or, the student has a computation error, but provides a valid strategy.
0	Student response is incorrect or irrelevant.

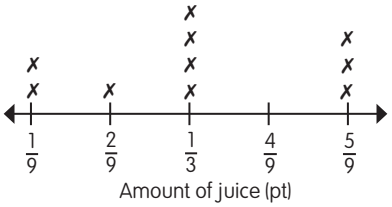
11

Score	Rubric
2	Student response includes each of the following 2 elements: Computation component: **72 ft³** Modeling component: The student shows correct use of formula to find the capacity of the container. Example: Capacity of the container $= 24 \times 3$ $= 72 \text{ ft}^3$
1	Student response includes 1 of the 2 elements. Or, the student has a computation error, but provides a valid strategy.
0	Student response is incorrect or irrelevant.

12

Score	Rubric
2	Student response includes each of the following 2 elements: Modeling component: The student shows correct work to find the answer. Reasoning component: The student correctly identifies that Ashley is correct. Example: $1 - \frac{1}{3} = \frac{2}{3}$ Amount of water needed to fill the tank completely $= \frac{2}{3} \times 30 \times 10 \times 25$ $= 5{,}000 \text{ cm}^3$ $= 5{,}000 \text{ mL}$ $= 5 \text{ L}$ So, Ashley is correct.
1	Student response includes 1 of the 2 elements.
0	Student response is incorrect or irrelevant.

13 **Part A**

Score	Rubric
2	Student response includes each of the following 2 elements: Modeling component: The student correctly identifies the fractions on the number line. Modeling component: The student correctly creates a line plot using the data in the table. Example: 
1	Student response includes 1 of the 2 elements.
0	Student response is incorrect or irrelevant.

Part B

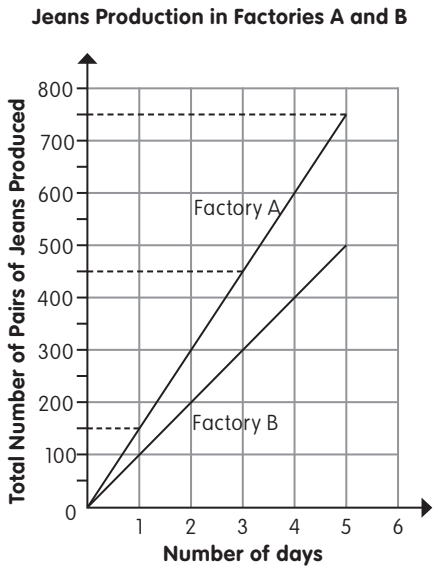
Score	Rubric
2	Student response includes each of the following 2 elements: Reasoning component: The student correctly identifies Melanie's mistake. Modeling component: The student shows correct work to find the answer. Example: Melanie did not multiply the amount of juice by the number of cartons. Total amount of juice $= \left(2 \times \frac{1}{9}\right) + \left(1 \times \frac{2}{9}\right)$ $+ \left(4 \times \frac{1}{3}\right) + \left(0 \times \frac{4}{9}\right)$ $+ \left(3 \times \frac{5}{9}\right)$ $= \frac{31}{9}$ $= 3\frac{4}{9} \text{ pt}$
1	Student response includes 1 of the 2 elements. Or, the student has a computation error, but provides a valid strategy.

0	Student response is incorrect or irrelevant.

14 **Part A**

Score	Rubric
2	Student response includes each of the following 2 elements: Reasoning component: The student correctly identifies the number pattern. For Factory A, the pattern is to add 150 to find the next number. For Factory B, the pattern is to add 100 to find the next number. Computation component: **Factory A** Number of Days: 0 | 1 | 2 | 3 | 4 | 5 Total Number of Pairs of Jeans Produced: 0 | 150 | 300 | 450 | **600** | **750** **Factory B** Number of Days: 0 | 1 | 2 | 3 | 4 | 5 Total Number of Pairs of Jeans Produced: 0 | 100 | 200 | 300 | **400** | **500**
1	Student response includes 1 of the 2 elements.
0	Student response is incorrect or irrelevant.

Part B

Score	Rubric
2	Student response includes each of the following 2 elements: Modeling component: The student correctly plots the line graph for Factory A. Modeling component: The student correctly plots the line graph for Factory B.
	Example: 
1	Student response includes 1 of the 2 elements.
0	Student response is incorrect or irrelevant.

15

Score	Rubric
2	Student response includes each of the following 2 elements: Reasoning component: The student correctly identifies that Aiden is correct. Reasoning component: The student correctly identifies that Juliet is correct. Example: Number of 1-inch cubes in 1 layer from the top $= 6 \times 5$ $= 30$ So, Aiden is correct. Number of 1-inch cubes in 1 layer from the side $= 5 \times 3$ $= 15$ So, Juliet is also correct.
1	Student response includes 1 of the 2 elements.
0	Student response is incorrect or irrelevant.

16 A

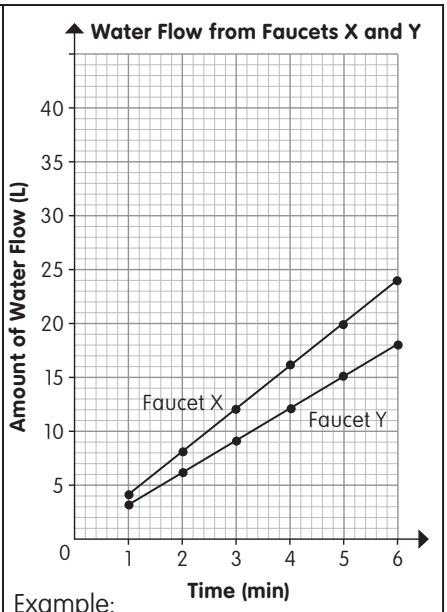
Section C

17

Score	Rubric
3	Student response includes each of the following 3 elements: Computation component: **1.08 L** Modeling component: The student shows correct work to find the volume of water in both containers. Modeling component: The student shows correct work to find the total volume of water in both containers and correct conversion of cubic centimeters to liters. Example: Using guess and check: Height of container (cm) / Volume of water in A (cm^3) / Volume of water in B (cm^3) / Difference in volume of water (cm^3) 10 / 30 × 5 ×10 = 1,500 cm / 15 × 8 ×10 = 1,200 cm / 300 5 / 30 × 5 ×5 = 750 / 15 × 8 ×5 = 600 / 150 4 / 30 × 5 ×4 = 600 / 15 × 8 ×4 = 480 / 120 Total volume of water in containers A and B = 600 + 480 = 1,080 cm^3 = 1,080 mL = 1.08 L
2	Student response includes 2 of the 3 elements. Or, the student has a computation error, but provides a valid strategy.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.

18

Score	Rubric
3	Student response includes each of the following 2 elements: Modeling component: The student correctly plots the line graph for Faucet X. Modeling component: The student correctly plots the line graph for Faucet Y. Reasoning component: The student correctly identifies Tyler's mistake.



Score	Rubric
	Example: Tyler did not take into account the amount of water collected after the first minute. $\frac{8}{6} = 1\frac{1}{3}$, $\frac{12}{9} = 1\frac{1}{3}$ The water collected from Faucet X is $1\frac{1}{3}$ times more than the amount collected from Faucet Y at each point in time.
2	Student response includes 2 of the 3 elements..
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.

19

Score	Rubric
4	Student response includes each of the following 4 elements: Computation component: **33 cm^3**, **92** Modeling component: The student shows correct work to find the volume of the wooden structure. Reasoning component: The student correctly identifies the cube that requires the least number of unit cubes to be added. Modeling component: The student shows correct work to find the answer. Example: Number of cubes in wooden structure = 5 + 4 + 3 + 5 + 2 + 1 + 3 + 2 + 1 + 4 + 3 = 33 Volume of wooden structure = 33 cm^2

	The least number of unit cubes would be needed to form a 5-centimeter cube. Number of cubes needed $= (5 \times 5 \times 5) - 33$ $= 125 - 33$ $= 92$ 92 more cubes are needed.
3	Student response includes 3 of the 4 elements. Or, the student has a computation error, but provides a valid strategy.
2	Student response includes 2 of the 4 elements.
1	Student response includes 1 of the 4 elements.
0	Student response is incorrect or irrelevant.

Cumulative Review 4

Section A

1. B
2. C
3. A
4. B
5. C and E
6. C
7. D
8. A
9. C, D, and E
10. B

Section B

11.

Score	Rubric
2	Student response includes each of the following 2 elements: Computation component: **9 ft** Modeling component: The student shows correct use of multiplication to find equivalent ratios. Example: $\times 3$ (5 : 3) $\times 3$ → (15 : 9) The length of the shorter piece is 9 feet.
1	Student response includes 1 of the 2 elements. Or, the student has a computation error, but provides a valid strategy.
0	Student response is incorrect or irrelevant.

12.

Score	Rubric
2	Student response includes each of the following 2 elements: Computation component: **24** Modeling component: The student shows correct work to find the answer. Example: Adults : Children $\times 16$ (6 : 4) $\times 16$ → (96 : 64) $64 - 40 = 24$ 24 boys are in the hall.
1	Student response includes 1 of the 2 elements. Or, the student has a computation error, but provides a valid strategy.
0	Student response is incorrect or irrelevant.

13.

Score	Rubric
2	Student response includes each of the following 2 elements: Computation component: **3 : 2 : 3** Modeling component: The student correctly shows use of equivalent ratios of three quantities. Example: $\$96 - \$36 - \$24 = \$36$ Brady : Molly : Faith $\div 12$ (36 : 24 : 36) $\div 12$ → (3 : 2 : 3) The ratio of the amount of Brady's savings to the amount of Molly's savings to the amount of Faith's savings is 3 : 2 : 3.
1	Student response includes 1 of the 2 elements. Or, the student has a computation error, but provides a valid strategy.
0	Student response is incorrect or irrelevant.

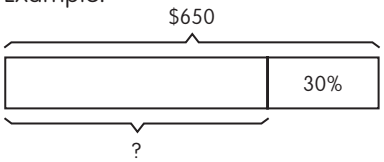
14

Score	Rubric
2	Student response includes each of the following 2 elements: Computation component: **42** Modeling component: The student shows correct use of multiplication to find equivalent fractions. Example: Andre : Rachel : Haley 3 : 7 : 4 × 6 × 6 × 6 18 : 42 : 24 Rachel had 42 toy cars.
1	Student response includes 1 of the 2 elements. Or, the student has a computation error, but provides a valid strategy.
0	Student response is incorrect or irrelevant.

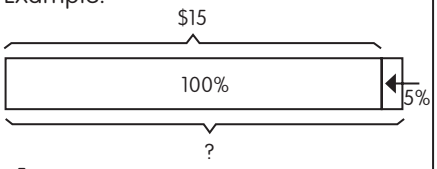
15

Score	Rubric
2	Student response includes each of the following 2 elements: Computation component: **30** Modeling component: The student shows correct work to find the answer. Example: $\frac{40}{100} \times 50 = 20$ $50 - 20 = 30$ 30 apples are red.
1	Student response includes 1 of the 2 elements. Or, the student has a computation error, but provides a valid strategy.
0	Student response is incorrect or irrelevant.

16

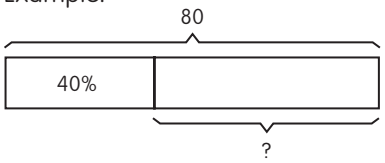
Score	Rubric
2	Student response includes each of the following 2 elements: Modeling component: The student shows correct work to find the answer. Reasoning component: The student correctly identifies that Store A had the better deal.
	Example:  $\frac{30}{100} \times \$650 = \$195$ $\$650 - \$195 = \$455$ Store A sold the refrigerator for $455. $\$650 - \$150 = \$500$ Store B sold the refrigerator for $500. So, Store A had better deal.
1	Student response includes 1 of the 2 elements. Or, the student has a computation error, but provides a valid strategy.
0	Student response is incorrect or irrelevant.

17

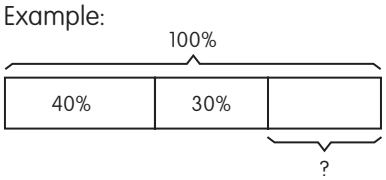
Score	Rubric
2	Student response includes each of the following 2 elements: Computation component: **$15.75** Modeling component: The student shows correct work to find the answer. Example:  $\frac{5}{100} \times \$15 = \$0.75$ $\$15 + \$0.75 = \$15.75$ The total cost of the book including the sales tax is $15.75.
1	Student response includes 1 of the 2 elements. Or, the student has a computation error, but provides a valid strategy.
0	Student response is incorrect or irrelevant.

18

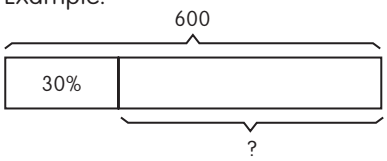
Score	Rubric
2	Student response includes each of the following 2 elements: Computation component: **48** Modeling component: The student shows correct work to find the answer.

	Example:  100% – 40% = 60% $\frac{60}{100} \times 80 = 48$ There are 48 cows.
1	Student response includes 1 of the 2 elements. Or, the student has a computation error, but provides a valid strategy.
0	Student response is incorrect or irrelevant.

19

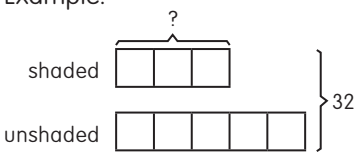
Score	Rubric
2	Student response includes each of the following 2 elements: Modeling component: The student shows correct work to find the answer. Reasoning component: The student correctly identifies that the claim is not true. Example:  100% – 40% – 30% = 30% She saved 30% of her money, which is less than the amount spent on food.
1	Student response includes 1 of the 2 elements. Or, the student has a computation error, but provides a valid strategy.
0	Student response is incorrect or irrelevant.

20

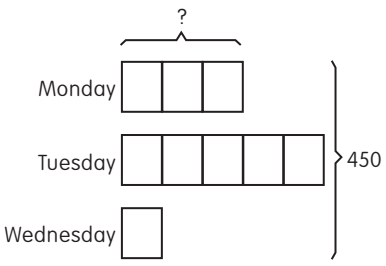
Score	Rubric
2	Student response includes each of the following 2 elements: Modeling component: The student shows correct work to find the answer. Reasoning component: The student correctly identifies that the librarian is correct.
	Example:  $\frac{30}{100} \times 600 = 180$ 600 – 180 = 420 420 – 180 = 240 So, the librarian is correct.
1	Student response includes 1 of the 2 elements. Or, the student has a computation error, but provides a valid strategy.
0	Student response is incorrect or irrelevant.

Section C

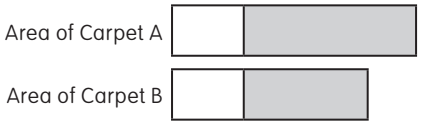
21

Score	Rubric
3	Student response includes each of the following 3 elements: Computation component: **4** Modeling component: The student shows correct work to find the total number of squares that should be shaded. Modeling component: The student shows correct work to find the number of additional squares that should be shaded. Example:  8 units = 32 1 unit = 32 ÷ 8 = 4 3 units = 4 × 3 = 12 12 – 8 = 4 4 more squares should be shaded.
2	Student response includes 2 of the 3 elements. Or, the student has a computation error, but provides a valid strategy.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.

22

Score	Rubric
3	Student response includes each of the following 3 elements: Reasoning component: The student correctly identifies Olivia's mistake. Computation component: **150** Modeling component: The student shows correct work to find the answer. Example: Olivia is incorrect because she only finds the number of shirts represented by 1 unit. She needs to multiply 50 by 3 to find the number of shirts sold on Monday.  9 units = 450 1 unit = 450 ÷ 9 = 50 3 units = 50 × 3 = 150 150 shirts were sold on Monday.
2	Student response includes 2 of the 3 elements. Or, the student has a computation error, but provides a valid strategy.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.

23

Score	Rubric
4	Student response includes each of the following **4** elements: Computation component: **7** : **6** Modeling component: The student shows correct work to find the area of Carpet B. Modeling component: The student shows correct work to find the area of Carpet A. Modeling component: The student shows correct work to find the ratio of the length of Carpet A to the length of Carpet B. Example  Area of Carpet B = 6 × 6 = 36 m^2 Area of Carpet A = 36 + 13 = 49 m^2 49 = 7 × 7 The length of Carpet A is 7 m. Length of Carpet A : Length of Carpet B = 7 : 6
3	Student response includes 3 of the 4 elements. Or, the student has a computation error, but provides a valid strategy.
2	Student response includes 2 of the 4 elements.
1	Student response includes 1 of the 4 elements.
0	Student response is incorrect or irrelevant.

Name: _____ Date: _____

Assessment Guide
Cumulative Review 1

50

Suggested Time: 45 min

Section A Multiple-Choice Questions

(10 × 2 = 20 points)

1 What is the product of 670 and 10^2?

(A) 670
(B) 6,700
(C) 67,000
(D) 670,000

2 What is the value of 420,000 divided by 70 tens?

(A) 600
(B) 4,200
(C) 6,000
(D) 7,000

3 A printing company uses 307 reams of paper in a month. Each ream has 500 sheets of paper. How many sheets of paper does the printing company use in 10 months?

(A) 3,070
(B) 5,000
(C) 153,500
(D) 1,535,000

4 What is the sum of $7\frac{3}{8}$ and $2\frac{5}{6}$?

A $9\frac{4}{7}$

B 10

C $10\frac{1}{3}$

D $10\frac{5}{24}$

5 A store had 11 kilograms of granola. $7\frac{6}{11}$ kilograms of granola were sold. How much granola was left in the store?

A $3\frac{4}{11}$ kg

B $3\frac{5}{11}$ kg

C $4\frac{5}{11}$ kg

D $4\frac{6}{11}$ kg

6 Which expression is equal to $\frac{8}{11}$?

A $8 + 11$

B 8×11

C $\frac{11}{8}$

D $8 \div 11$

7 Which of the following is **not** equal to the product of $\frac{7}{3}$ and 5?

A $\frac{7}{3} + \frac{7}{3} + \frac{7}{3} + \frac{7}{3} + \frac{7}{3}$

B $\frac{5}{3} \times 7$

C $11\frac{2}{3}$

D 35

8 What is the missing number?

$\frac{12}{7} \times \frac{5}{6} = 1\frac{?}{7}$

A 2

B 3

C 18

D 60

9 Which of the following has the same value as $\frac{1}{5} \div 3$?

A $\frac{1}{5} \times \frac{1}{3}$

B $5 \div \frac{1}{3}$

C $3 \div 5$

D $15 \div 3$

10 The width of a piece of cloth is $3\frac{1}{2}$ meters. Its length is $1\frac{1}{3}$ times its width. What is the area of the piece of cloth?

A $4\frac{2}{3}$ m^2

B $6\frac{2}{9}$ m^2

C $16\frac{1}{3}$ m^2

D $21\frac{7}{9}$ m^2

Section B Short Answer Questions

(10 × 2 = 20 points)

11 Write 5,029,736 in expanded form.

12 7,030 × 29 =

Write your answer in the answer grid.

⊙	⊙	⊙	⊙	⊙	⊙
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

13 Yuna had 115 beads. She packed the beads into bags of 15. She wants to put all of the beads into bags. She said that she would need 8 bags.

Do you agree with Yuna? Explain.

Show your work and write your answer in the space below.

14 250 – 100 ÷ 5 =

Write your answer in the answer grid.

⊙	⊙	⊙	⊙	⊙	⊙
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

15 $(42 - 10) \times 3 - (36 + 6) =$

Write your answer in the answer grid.

⊙	⊙	⊙	⊙	⊙	⊙
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

16 $\frac{3}{5} \div 2 =$

Show your work and write your answer in the space below.

17 Matthew ran $4\frac{3}{4}$ miles and swam $1\frac{5}{6}$ miles in a race. What was the total distance of the race?

Show your work and write your answer in the space below.

18 Jackson is preparing to host a party and he plans to prepare 40 cups of punch. Each cup can hold $\frac{1}{5}$ liter of the punch. Jackson mixes $2\frac{5}{8}$ liters of syrup with $8\frac{2}{5}$ liters of water.

Does Jackson have enough punch for the party? Explain.

Show your work and write your answer in the space below.

19 Diego took $3\frac{3}{4}$ hours to read a book. Isaiah took $\frac{1}{3}$ hour less to read his book. How much time did they spend reading in all?

Show your work and write your answer in the space below.

20 A rectangular wall measures $9\frac{1}{3}$ meters by $2\frac{1}{7}$ meters. What is the area of the wall?

Show your work and write your answer in the space below.

Section C Constructed Response

(21: 3 points; 22: 3 points; 23: 4 points)

21 Zoe wanted to make 8 bracelets but was short of 115 beads. She made 3 bracelets and found that she had 240 beads left. How many beads did Zoe have?

Write your answer and your work or explanation in the space below.

22 Liam baked some cookies. $\frac{7}{8}$ of them were almond cookies and the rest of them were chocolate cookies. He gave away $\frac{1}{2}$ of the almond cookies and $\frac{5}{8}$ of the chocolate cookies. He gave away 132 cookies in all. How many cookies did Liam bake at first?

Write your answer and your work or explanation in the space below.

23 Jack had some marbles. He gave $\frac{2}{9}$ of them to John and $\frac{3}{7}$ of the remainder to Landon. Then, Jack bought 45 new marbles and had 15 more marbles than what he had at first. Zane said that Jack had 30 marbles at first because 45 – 15 = 30.

- Explain Zane's mistake.
- How many marbles did Jack have at first?
- Explain how you arrived at your answer.

Write your answer and your work or explanation in the space below.

Name: _____ Date: _____

Assessment Guide
Cumulative Review 2

50

Suggested Time: 45 min

Section A Multiple-Choice Questions

(10 × 2 = 20 points)

1 What is 7.108 as a mixed number in simplest form?

A $7\frac{1}{5}$

B $7\frac{18}{25}$

C $7\frac{11}{125}$

D $7\frac{27}{250}$

2 What is 1.025 as a fraction in simplest form?

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

B $1\frac{1}{8}$

C $1\frac{1}{40}$

D $1\frac{1}{125}$

3 What is the sum of the value of digit 3 in 1.293 and the value of digit 5 in 2.59?

A 0.35

B 0.305

C 0.503

D 0.8

4 What is 6.389 when rounded to the nearest hundredth?

(A) 6.37
(B) 6.38
(C) 6.39
(D) 6.40

5 What is $8\frac{8}{1{,}000}$ as a decimal?

(A) 8.008
(B) 8.08
(C) 8.8
(D) 8.88

6 What is the sum of 7.08 and 2.5?

(A) 9.13
(B) 9.508
(C) 9.58
(D) 10.3

7 What are the missing digits?

$$\begin{array}{r} \square.\square\,2 \\ +\ 3.2 \\ \hline 7.1\ \ 2 \end{array}$$

A 2; 9

B 3; 9

C 4; 9

D 9; 2

8 Which of the following has a value of 10.5?
Choose the **two** correct answers.

A 0.021×50

B 0.021×500

C 0.21×50

D 0.21×500

E 2.1×500

9 A tank contained 7.02 liters of water. 550 milliliters of water were poured out. How many milliliters of water were left in the tank?

A 64,700 milliliters

B 6,470 milliliters

C 647 milliliters

D 6.47 milliliters

10 Amanda ran a number of laps around a track. Each lap was 0.4 kilometer long. She ran a total distance of 1.2 kilometers. Dan ran 2 more laps than Amanda around the same track. How many kilometers did Dan run?

A 0.2 km

B 0.8 km

C 2 km

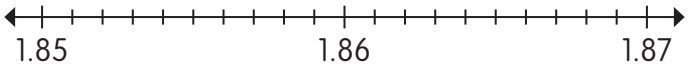
D 2.4 km

Section B Short Answer Questions

(10 × 2 = 20 points)

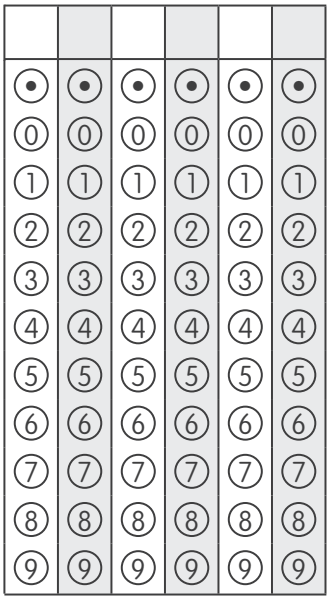
11 The distance between the library and Wyatt's house is 1.86 kilometers, rounded to the nearest 2 decimal places. Find the greatest and least possible distance in 3 decimal places before it was rounded to the nearest hundredth. Explain how you arrived at your answer. Use the number line to help you.

Show your work and write your answer in the space below.



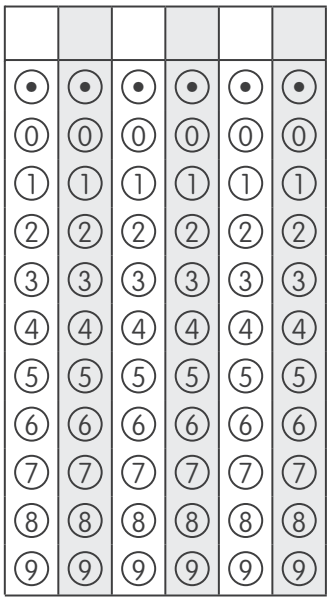
12 What is $8\frac{3}{8}$ as a decimal?

Write your answer in the answer grid.



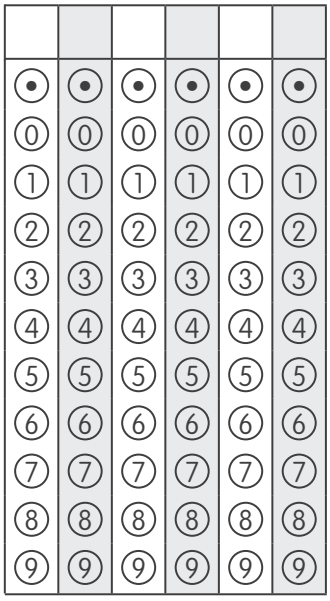
13 3.5 + 1.2 =

Write your answer in the answer grid.



14 What is 5.36 less than 29.78?

Write your answer in the answer grid.



15 Express 9.875 as a mixed number in simplest form.

Show your work and write your answer in the space below.

16 $2.8 \div 40 =$

Write your answer in the answer grid.

⊙	⊙	⊙	⊙	⊙	⊙
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

17 Estimate the value of 27.18×2 by rounding to the nearest whole number.

Show your work and write your answer in the space below.

18 Kevin bought 7 melons that cost $2.75 each. He gave the cashier $20. He said that he received $0.75 change.

Was Kevin correct? Explain.

Show your work and write your answer in the space below.

19 There are two pieces of ribbon. One piece is 6.42 feet long. The other piece is 1.56 feet shorter. Sanjay needs 12 feet of ribbon for a party.

Does Sanjay have enough ribbon? Explain.

Show your work and write your answer in the space below.

20 Ivan saved $7.50. Kylie saved twice as much as Ivan. Pedro saved $3.80 more than Kylie. How much did Pedro save?

Show your work and write your answer in the space below.

Section C Constructed Response

(21: 3 points; 22: 3 points; 23: 4 points)

21 The result of a 100-meter race is as shown.

Athlete	Time (seconds)
Andrea	15.325
Brianna	14.501
Carla	15.243
Daniella	14.498
Emilia	15.401
Fátima	14.975

Fátima said that she came in last.

- Explain Fátima's mistake.
- Which position was Fátima in?
- Explain how you arrived at your answer.

Write your answer and your work or explanation in the space below.

22 Three boys recorded their long jump distances. Eric jumped 6 centimeters further than Daniel. Eddie jumped 0.12 meter further than Eric. The three boys jumped a total of 5.19 meters. How far did Eddie jump?

Write your answer and your work or explanation in the space below.

23 4 pears and 6 apples cost $6.90. 6 pears and 4 apples cost $7.60.
What is the cost of 1 pear? What is the cost of 1 apple?

Write your answer and your work or explanation in the space below.

Name: _____ Date: _____

Assessment Guide
Cumulative Review 3

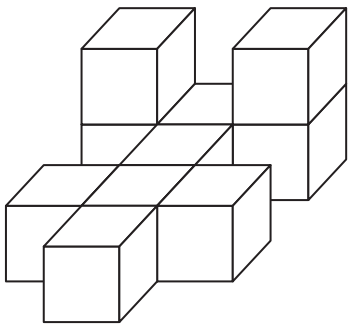
50

Suggested Time: 45 min

Section A Multiple-Choice Questions

(1 to 5 Part A, 5 Part B, 6 Part A, 6 Part B, 7, 8: 2 points each)

1 This solid is made up of 1-inch cubes. What is the volume of the solid?



(A) 1 cubic inches
(B) 3 cubic inches
(C) 10 cubic inches
(D) 30 cubic inches

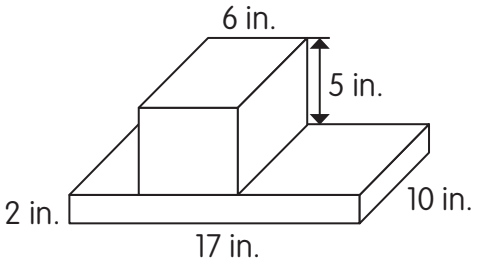
2 A rectangular prism has a square base of side 3 meters long and a height of 4 meters. What is its volume?

(A) 9 cubic meters
(B) 12 cubic meters
(C) 36 cubic meters
(D) 64 cubic meters

3 A farmer has a barrel with 3 liters and 30 milliliters of water. She adds half a liter of water to the barrel. What is the new volume of water in the barrel, in cubic centimeters?

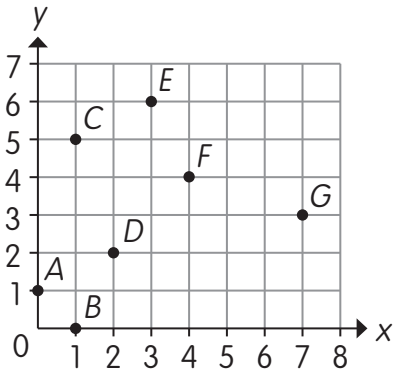
(A) 2,530 cubic centimeters
(B) 2,800 cubic centimeters
(C) 3,530 cubic centimeters
(D) 3,800 cubic centimeters

4 What is the volume of the solid?



(A) 300 cubic inches
(B) 340 cubic inches
(C) 600 cubic inches
(D) 640 cubic inches

5 This question has two parts.



Part A

What are the coordinates of point *E*?

A (3, 6)

B (3, 7)

C (4, 4)

D (7, 3)

Part B

Which of the following statements is **not** true?

A The coordinates of point *F* are (4, 4).

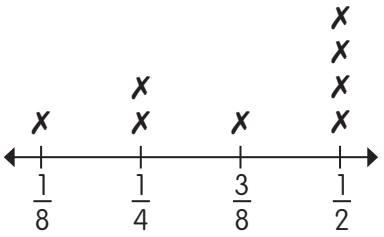
B Point *G* is 6 units to the right and 2 units below point *C*.

C Point *D* is 2 units to the left and 2 units below point *F*.

D Points *B*, *C*, and *G* form an obtuse triangle.

6 This question has two parts.
The line plot shows the volumes of water in 8 bottles.

Each ✗ represents 1 bottle.



Volume of water (qt)

Part A

What is the total volume of water in the 8 bottles?

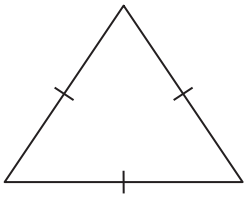
(A) 1 quart
(B) 2 quarts
(C) 3 quarts
(D) 4 quarts

Part B

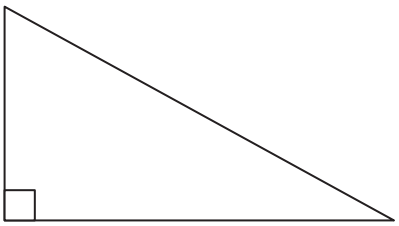
The total volume of water in the 8 bottles is redistributed equally into each bottle. What is the volume of water in each bottle now?

(A) $\frac{1}{2}$ quart
(B) $\frac{3}{8}$ quart
(C) $\frac{1}{4}$ quart
(D) $\frac{1}{8}$ quart

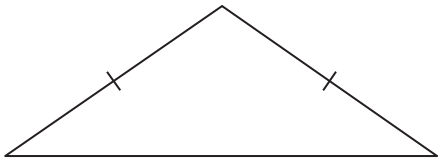
7 Which of the following is an equilateral triangle?



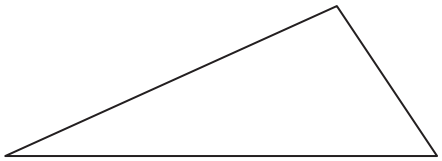
W



X



Y



Z

A W
B X
C Y
D Z

8 Which figure is always a rectangle?

A Parallelogram
B Quadrilateral
C Rhombus
D Square

Section B Short Answer Questions

(9 to 13 Part A, 13 Part B, 14 Part A, 14 Part B; 15 to 16: 2 points each)

9 What is the volume of a rectangular prism measuring 12 inches by 6 inches by 3 inches?

Show your work and write your answer in the space below.

10 What is the volume of a cube with an edge length of 20 feet?

Show your work and write your answer in the space below.

11 The base area of a rectangular container is 24 square feet. The height of the container is 3 feet. What is the capacity of the container?

Show your work and write your answer in the space below.

12 A rectangular fish tank, 30 centimeters by 10 centimeters by 25 centimeters, is $\frac{1}{3}$ filled with water. Ashley says that she needs 5 more liters of water to fill the fish tank completely.

Do you agree with Ashley? Explain.

Write your answer and your work or explanation in the space below.

13 This question has two parts.

The table shows the amount of juice in 10 cartons.

Amount of juice (pt)	$\frac{1}{9}$	$\frac{2}{9}$	$\frac{1}{3}$	$\frac{4}{9}$	$\frac{5}{9}$
Number of cartons	2	1	4	0	3

Part A

Use the data to make a line plot.

Show your work and write your answer in the space below.

Part B

Melanie says that there are $1\frac{2}{3}$ pints of juice in all the cartons because $\frac{1}{9} + \frac{2}{9} + \frac{1}{3} + \frac{4}{9} + \frac{5}{9} = 1\frac{2}{3}$.

Explain Melanie's mistake. What should the correct answer be?

14 This question has two parts. Factory A produces 150 pairs of jeans in 1 day. Factory B produces 100 pairs of jeans in 1 day.

Part A

Complete the number pattern.

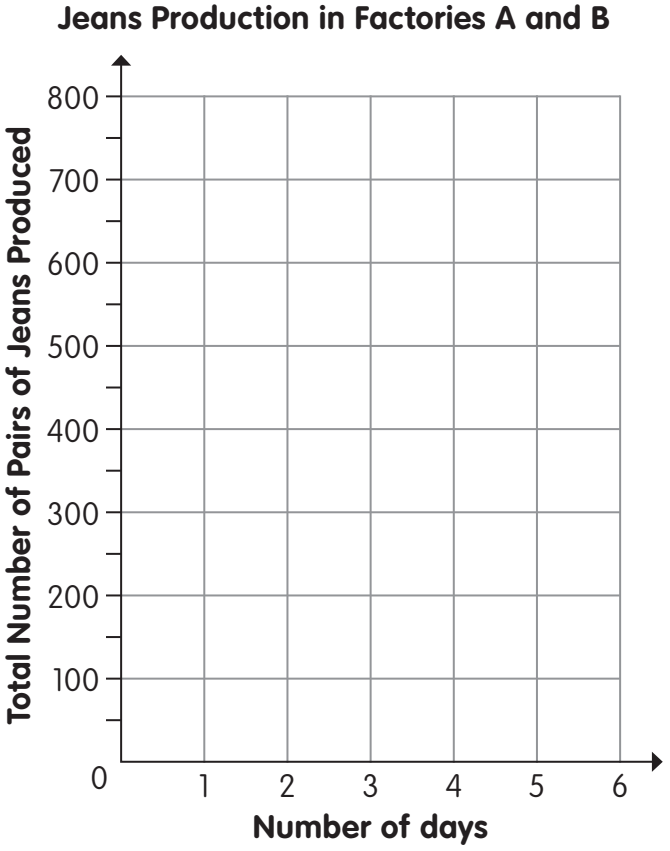
Write your answer in the tables below. Explain how you arrived at your answer.

Factory A						
Number of Days	0	1	2	3	4	5
Total Number of Pairs of Jeans Produced	0	150	300	450		

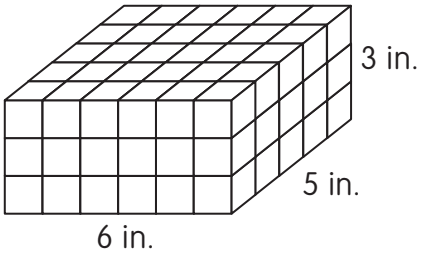
Factory B						
Number of Days	0	1	2	3	4	5
Total Number of Pairs of Jeans Produced	0	100	200	300		

Part B

Plot each point on a coordinate plane and make line graphs below.



15 The rectangular prism is made of 1-inch cubes.

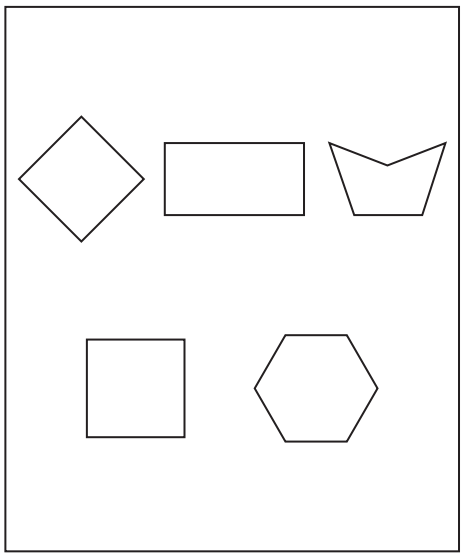


1 layer of cubes is to be removed from the rectangular prism. Aiden says that 30 cubes will be removed in all. Juliet says that 15 cubes will be removed in all.

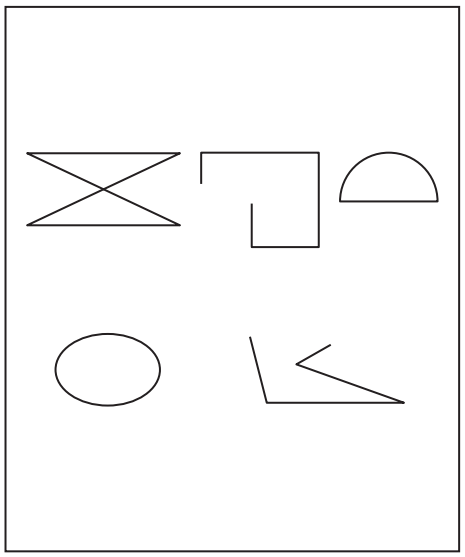
Who is correct, Aiden or Juliet? Explain.

Show your work and write your answer in the space below

16 Look at Set A and Set B.



Set A



Set B

Write the answer in the blank.

Set _____ consists of polygons.

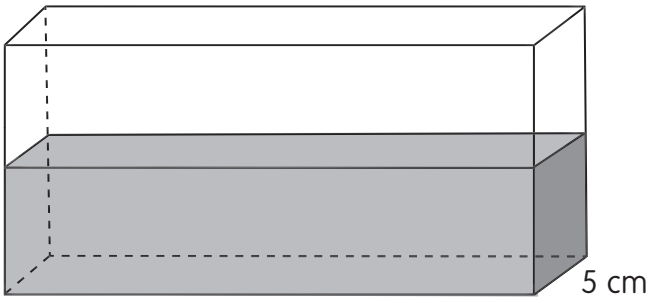
Section C Constructed Response

(17: 3 points; 18: 3 points; 19: 4 points)

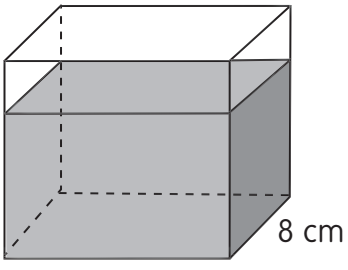
17 Two rectangular containers, A and B, contain some water. The water level in both containers is the same. The difference in the volume of water in the two containers is 120 cubic centimeters. What is the total volume of water in containers A and B? Give your answer in liters.

Write your answer and your work or explanation in the space below.

Container A



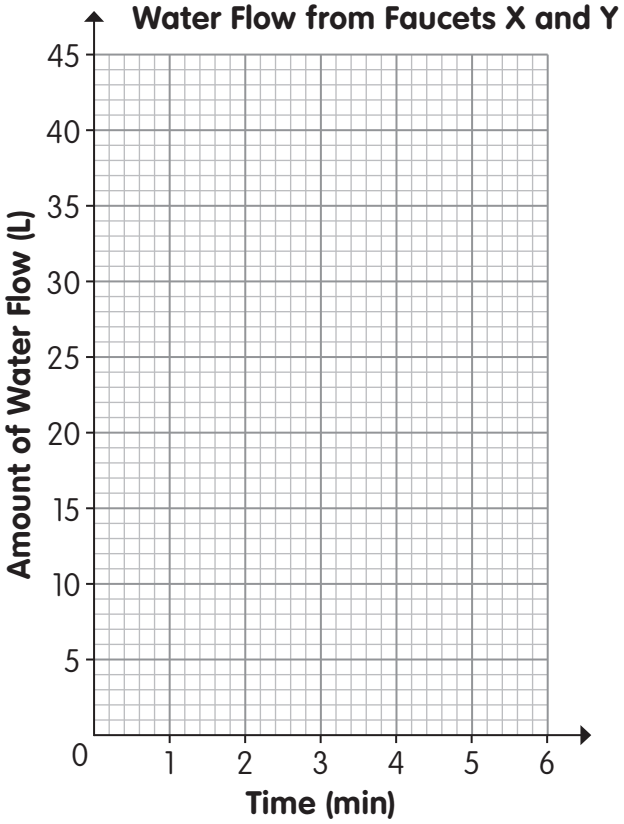
Container B



18 Water flows out of Faucet X at 4 liters per minute while water flows out of Faucet Y at 3 liters per minute. Tyler presents the data in the table below.

Time (min)	1	2	3	4	5	6
Amount of water from Faucet X (L)	4	8	12	16	20	24
Amount of water from Faucet Y (L)	3	6	9	12	15	18

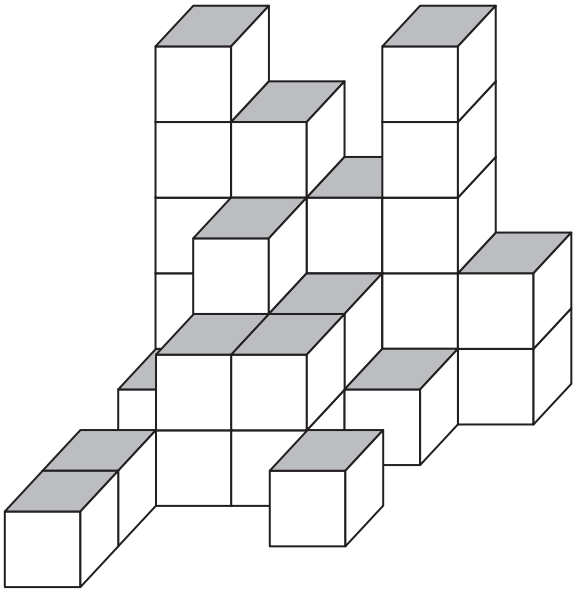
Plot each point on the coordinate plane and make line graphs below.



Tyler places a tank below each faucet to collect the water that flows out. He says that the water collected from Faucet X is always 1 liter more than that from Faucet Y at each point in time. Explain his mistake.

Write your answer and your work or explanation in the space below.

19 Daniel fixed a wooden structure as shown below. The structure is made up of 1-centimeter cubes.



- What is the volume of the wooden structure?
- What is the least number of unit cubes needed to form a cube? Explain how you arrived at your answer.

Write your answers and your work or explanation in the space below.

Name: _____ Date: _____

Assessment Guide
Cumulative Review 4

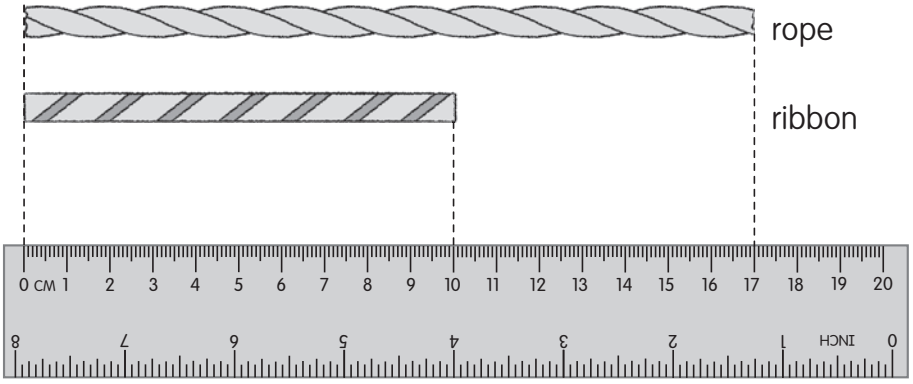
50

Suggested Time: 45 min

Section A Multiple-Choice Questions

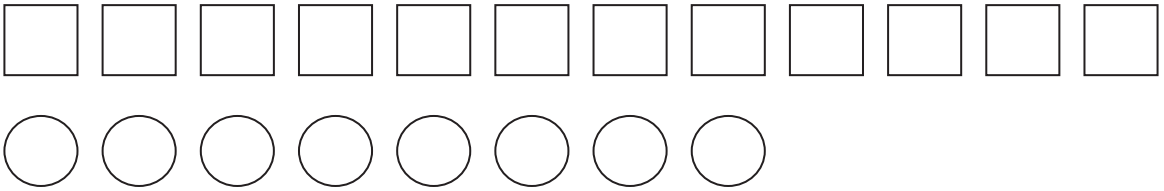
(10 × 2 = 20 points)

1 What is the ratio of the length of the ribbon to the total length of the ribbon and the rope?



A 10 : 17
B 10 : 27
C 17 : 10
D 17 : 27

2 What is the ratio of the number of squares to the number of circles in the simplest form?



A 12 : 8
B 8 : 12
C 3 : 2
D 2 : 3

3 What is the missing number?

13 : 5 = _____ : 25

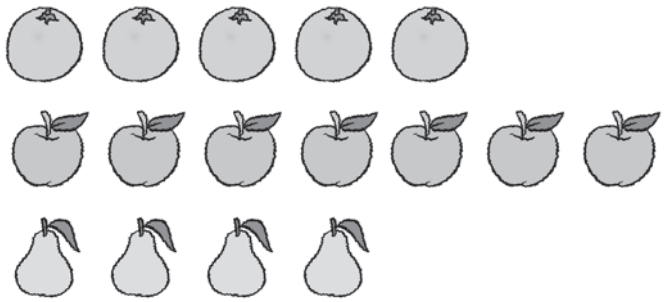
A 65

B 33

C 26

D 18

4 What is the ratio of the number of pears to the number of oranges to the number of apples?



A 7 : 4 : 5

B 4 : 5 : 7

C 5 : 7 : 4

D 5 : 7 : 11

5 What are the missing numbers?

3 : 8 : 6 = _____ : _____ : _____

Choose the **two** correct answers.

A 21; 26; 24

B 12; 32; 30

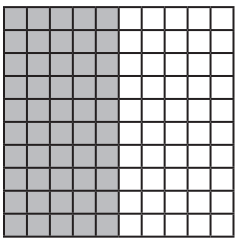
C 9; 24; 18

D 5; 12; 10

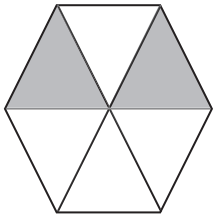
E 6; 16; 12

6 Noah drew a figure and shaded 60% of it. Which of the following figures could be the one Noah drew?

A

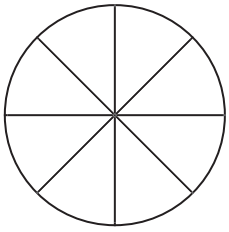


B



C

D



7 Which of the following statements is true?

A $\frac{4}{5}$ is the same as 40%.

B 32% > $\frac{16}{50}$ as a percent.

C $\frac{75}{150}$ as a percent is 55%.

D 0.13 expressed as a percent is 13%.

8 There are 800 people at a carnival. 64% of them are adults. How many people are adults?

A 512

B 486

C 482

D 480

9 There are 150 fish in a pond. 61 of them are guppies. 30% of them are mollies. The rest are catfish. Which of the following statements are true? Choose the **three** correct answers.

A 40% of the fish are catfish.

B 0.61% of the fish are guppies.

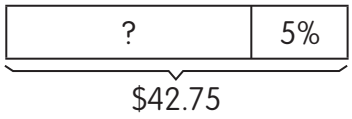
C There are 44 catfish in the pond.

D There are more mollies than catfish.

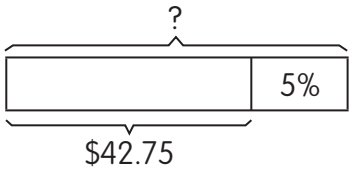
E There are 16 more guppies than mollies.

10 A bag costs $42.75 after a discount of 5%. Daniel wants to find the price of the bag before discount. Which of the following models can he use?

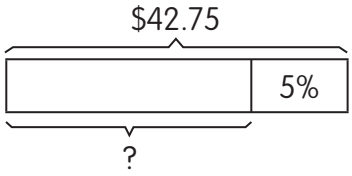
A



B



C



D

Section B Short Answer Questions

(10 × 2 = 20 points)

11 A log is cut into two pieces in the ratio 5 : 3. The length of the longer piece is 15 feet long. What is the length of the shorter piece?

Show your work and write your answer in the space below.

12 The ratio of the number of adults to number of children in a hall is 6 : 4. There are 96 adults and 40 girls. How many boys are in the hall?

Show your work and write your answer in the space below.

13 Brady, Molly, and Faith save $96 in all. Brady saves $36 and Molly saves $24. Express the amount of Brady's savings to the amount of Molly's savings to the amount of Faith's savings as a ratio in simplest form.

Show your work and write your answer in the space below.

14 The ratio of the number of toy cars Andre, Rachel, and Haley had was 3 : 7 : 4. Haley had 24 toy cars. How many toy cars did Rachel have?

Show your work and write your answer in the space below.

15 There are 50 apples in a box. 40% of the apples are green and the rest are red. How many apples are red?

Show your work and write your answer in the space below.

16 The usual price of a refrigerator was $650. Store A sold the refrigerator at a 30% discount. Store B sold the same refrigerator at $150 less than the usual price.
Which store had a better deal? Explain.

Show your work and write your answer in the space below.

17 A book costs $15 before sales tax. There is a 5% sales tax on the book. What is the total cost of the book including the sales tax?

Show your work and write your answer in the space below.

18 There are 80 animals in a farm. 40% of the animals are sheep and the rest are cows. How many cows are there?

Show your work and write your answer in the space below.

19 Ms. Torres had $60. She spent 40% of the money on food, 30% of the money on shopping and she saved the rest. She told a friend that she saved more money than the amount spent on food. Is her claim true? Explain.

Show your work and write your answer in the space below.

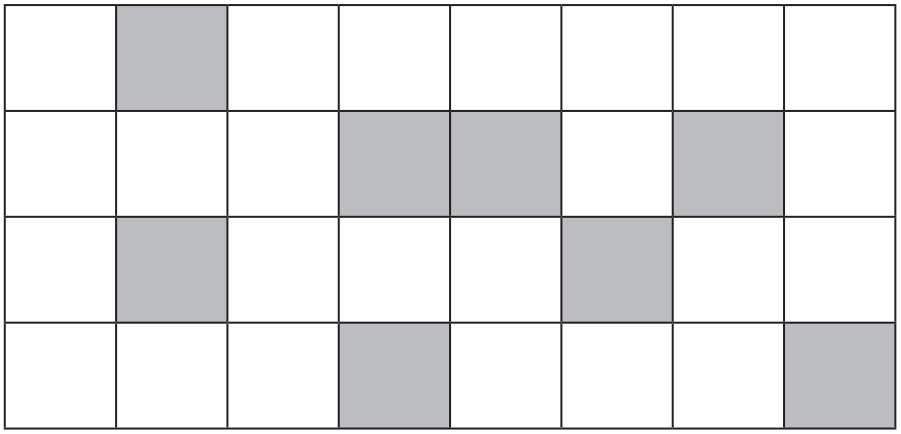
20 There are 600 books at a library. 30% of the books are fiction books and the rest are non-fiction books. The librarian says that there are 240 more non-fiction books than fiction books. Is he correct? Explain.

Show your work and write your answer in the space below.

Section C Constructed Response

(21: 3 points; 22: 3 points; 23: 4 points)

21 The figure below is made up of identical squares. How many more squares should be shaded so that the ratio of the number of shaded squares to the number of unshaded squares is 3 : 5?



Write your answer and your work or explanation in the space below.

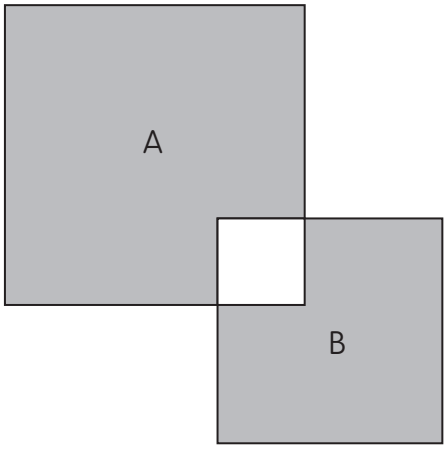
22 The ratio of the number of shirts sold on Monday to the number of shirts sold on Tuesday to the number of shirts sold on Wednesday was 3 : 5 : 1. The total number of shirts sold during the three days was 450.

Olivia says that 50 shirts were sold on Monday.

- Explain Olivia's mistake.
- What should the correct answer be?

Write your answer and your work or explanation in the space below.

23 Ms. Perez has two square carpets in her living room, A and B. The carpets overlap each other as shown. The length of Carpet B was 6 meters. The difference between the shaded area of Carpet A and the shaded area of Carpet B was 13 square meters. Find the ratio of the length of Carpet A to the length of Carpet B.



Write your answer and your work or explanation in the space below.