SUMMER MATH PACKET
6th GRADE ENTERING 7TH GRADE

Date _____

Name: _____

SKILL: *Divide a whole number, with and without remainders, up to four digits*

Solve each problem.

$6 \overline{)1{,}242}$

$32 \overline{)7{,}584}$

$12 \overline{)9{,}744}$

Name: _____

Date _____

SKILL: Divide a whole number, with and without remainders, up to four digits

$131\overline{)9{,}308}$ $9\overline{)3{,}584}$ $25\overline{)5{,}592}$

Date _____

Name: _____

SKILL: Identify the Least Common Denominator (LCD) for two fractions

Directions: Find the Least Common Denominator for each set of fractions

1. $\dfrac{1}{4}$ and $\dfrac{3}{5}$

2. $\dfrac{2}{3}$ and $\dfrac{1}{8}$

3. $\dfrac{1}{2}$ and $\dfrac{7}{10}$

4. $\dfrac{5}{8}$ and $\dfrac{1}{2}$

5. $\dfrac{2}{5}$ and $\dfrac{1}{6}$

Date _____

Name: _____

SKILL: Identify the Least Common Denominator (LCD) for two fractions

Directions: Use the Least Common Denominator to find equivalent fractions for each problem.

1. $\dfrac{1}{4}$ and $\dfrac{1}{6}$

2. $\dfrac{2}{7}$ and $\dfrac{3}{4}$

3. $\dfrac{1}{8}$ and $\dfrac{5}{12}$

Name: _____

Date _____

SKILL: Use divisibility rules

Directions: Use the "Divisibility Rules" and your calculators to list the factors of each pair of numbers. What is the Greatest Common Factor for each pair of numbers?

30 factors : _____

64 factors: _____

GFC for 30 and 64 is _____

18 factors: _____

90 factors : _____

GFC for 18 and 90 is _____

Name: _____

Date _____

SKILL: Use divisibility rules

Write the numbers that divide into it on the line next to the number.

1] 225 _____

2] 136 _____

3] 7210 _____

4] 5728 _____

5] 1575 _____

Date _____

Name: _____

SKILL: Identify the least common multiple for a set of whole numbers less than 12

Directions: Find the LCM.

5, 7   _____

5, 8   _____

9, 12   _____

3, 6, 9   _____

Date _____

Name: _____

SKILL: Multiply decimals, two to three decimal digits

1)   4.36
   x   0.57

2)   3.52
   x   0.64

3)   9.12
   x   1.78

Name: _____   **Date** _____

SKILL: Identify the Greatest Common Factor (GCF) for a set of whole numbers

Find the Greatest Common Factor for the set of numbers.

1.   18 and 24 = _____

2.   12 and 16 = _____

3.   18 and 16 = _____

4.   20 and 24 = _____

5.   9 and 15 = _____

Date _____

Name: _____

SKILL: Multiply decimals, two to three decimal digits

1)   0.157
   x   0.049

2)   0.632
   x   0.007

3)   0.549
   x   0.378

Date _____

Name: _____

SKILL: Multiply a decimal by a decimal, with factors up to the thousandths place

1.
$$
\begin{array}{r}
0.357 \\
\times\ \ 0.943 \\
\hline
\end{array}
$$

2.
$$
\begin{array}{r}
0.159 \\
\times\ \ 0.761 \\
\hline
\end{array}
$$

3.
$$
\begin{array}{r}
0.369 \\
\times\ \ 0.846 \\
\hline
\end{array}
$$

Date _____

Name: _____

SKILL: *Divide decimals by a whole number, up to two digits*

$19\overline{)0.285}$

$26\overline{)1.1830}$

$5\overline{)5.460}$

$8\overline{)1.76}$

Date _____

Name: _____

SKILL: Divide a decimal by a whole number

$25\overline{)50.75}$ $3\overline{)2.1}$ $35\overline{)8.47}$

$72\overline{)3.60}$ $6\overline{)9.78}$

Date _____

Name: _____

SKILL: Divide a decimal by a whole number, three decimal digits

$6\overline{)0.546}$

$2\overline{)0.106}$

$4\overline{)0.232}$

Date _____

Name: _____

SKILL: Divide decimals, one decimal digit divisor

1) $0.6\overline{)0.18}$

2) $9.6\overline{)8.160}$

3) $0.8\overline{)0.0272}$

4) $5.2\overline{)62.4}$

Date _____

Name: _____

SKILL: Express a decimal as a percent and a percent as a decimal

Directions: Change the following decimals to percents:

1) 0.83 = _____

2) 0.04 = _____

3) 0.4 = _____

4) 0.2 = _____

5) 1.35 = _____

Name: _____

Date _____

Independent Practice Sheet

Directions: Match the decimals to the correct percents.

A. 0.50   a. 156%

B. 0.05   b. 80%

C. 0.65   c. 50%

D. 0.85   d. 15%

E. 0.8   e. 5%

F. 1.56   f. 65%

G. 0.15   g. 85%

Directions: Change each decimal to a percent.

1) 0.5 = _____   6) 0.87 = _____

2) 3.42 = _____   7) 0.45 = _____

3) 0.8 = _____   8) 0.96 = _____

4) 0.17 = _____   9) 1.3   = _____

5) 1.56 = _____   10) 0.1 = _____

Name: _____   Date _____

SKILL: *Express a percent as a decimal*

1] 65% _____   2] 34% _____

3] 4% _____   4] 132% _____

5] 1% _____   6] 120% _____

INDEPENDENT PRACTICE ACTIVITY SHEET

Directions: Match the percents to the correct decimal.

A. 59%   a] .63

B. 86%   b] .01

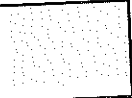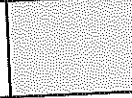C. 1%   c] .05

D. 32%   d] .59

E. 63%   e] .32

F. 5%   f] .86

G. 76%   g] .76

Directions: Change to decimals.

1. 41%   _____

2. 126%   _____

3. 16%   _____

4. 32%   _____

Name: _____   Date _____

Guided Practice Worksheet

Office	
Closet	
Classroom	
Cptr. Station	
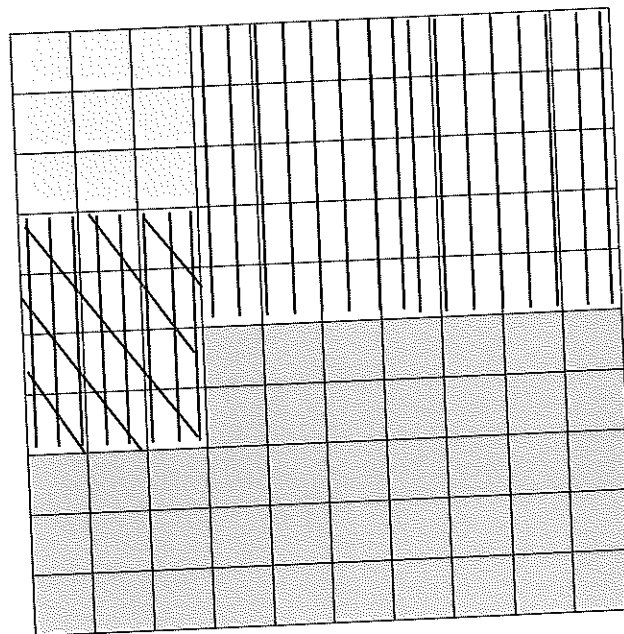
Ratio	Fraction	Decimal	Percent
_____ out of 100			
_____ out of 100			
_____ out of 100			
_____ out of 100			

Name: _____

Date _____

SKILL: Convert a decimal to a percent through fractions

Ratio	Fraction	Decimal	Percent
19 to 100			
	$\dfrac{74}{100}$		
		0.3	
			9%

Name: _____   **Date** _____

SKILL: Convert a decimal to a percent through fractions

Fraction	Decimal	Percent
$\dfrac{9}{25}$		
$\dfrac{11}{20}$		
$\dfrac{3}{8}$		
$\dfrac{5}{6}$		
$\dfrac{2}{5}$		

Name: _____

Date _____

SKILL: *Find the percent of a number*

Directions: Find the percent of each number using the method stated.
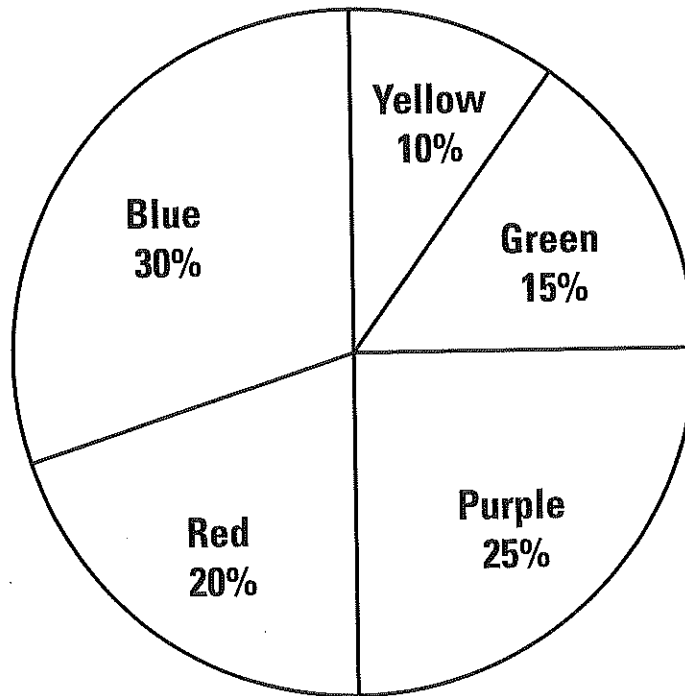
1) By decimal: 5% of 80 = _____

2) By fraction: 75% of 260 = _____

3) By decimal: 68% of 75 = _____

4) By fraction: 2% of 50 = _____

Name: _____   **Date** _____

The circle graph shows the favorite colors of 400 school students.

Which color choice had the most votes?   _____

Which color choice had the least votes?   _____

How many students chose purple?   _____

How many students chose yellow?   _____

How many more students chose red than green?   _____

Name: _____

Date _____

SKILL: Find the percent of a number

1) 75% of what number is 30?

2) 60% of what number is 24?

3) 80% of what number is 24?

4) 12% of what number is 63?

Name: _____   **Date** _____

SKILL: Find the percent of a number

1) What percent of 120 is 36?

2) What percent of 500 is 75?

3) What percent of 350 is 91?

Name: _____ Date _____

SKILL: *Find the percent of a number, including money notation*

1) 50% of 12 is _____

2) What is 25% of 120?

3) Find 20% of 865.

Name: _____

Date _____

SKILL: *Find the percent of a number, including money notation*

1) Regular Price: $12.20

   Discount Price: $ 3.50

   Discount Percent: _____

2) Regular Price: $274

   Discount Price: $ 11

   Discount Percent: _____

3) Regular Price: $800

   Discount Price: $ 68

   Discount Percent: _____

Name: _____   **Date** _____

SKILL: Identify proportions in a ratio

Directions: Set up a proportion to solve each problem.

ratio	given information	missing information

1) $75 for 5 hours   25 hours   amount of money?

2) 15 oranges for $1.50   75 oranges   amount of money?

Name: _____

Date _____

SKILL: Subtract positive and negative integers

Use the plus negative trick and the double negative trick and the rules for addition of integers to solve these problems.

-7 -2   = _____

6 – (-3)   = _____

-3 – (-5)   = _____

24 – 36   = _____

-13 – (-2)   = _____

Name: _____

Date _____

SKILL: Identify and use exponents

Solve for the products:

1] Six to the second power = _____

2] 8^2 = _____

3] 4 cubed = _____

4] 2^4 = _____

5] Which is larger 3^3 or 3 x 8? _____

Name: _____   **Date** _____

SKILL: Calculate the range, mean, mode, and median for a set of numbers

1)

10, 6, 8, 9, 2	Mean =
	Mode =
	Median =
	Range =

2)

53, 65, 42, 53, 52	Mean =
	Mode =
	Median =
	Range =

3)

5, 9, 9, 17, 10	Mean =
	Mode =
	Median =
	Range =

Name: _____   Date _____

SKILL: Calculate the area and perimeter of geometric shapes

1. A polygon has 5 sides. The sides measure: 3 in., 4 in., 10 in., 7 in., and 5 in. What is the perimeter?

2. Find the perimeter of a square with sides that measure 20 inches each.

3. Find the perimeter of a rectangle with a width of 2 cm and a length of 8 cm.

4. A triangle has two sides that measure 4 m each and a base that measures 6 m. What is the perimeter?

Name: _____

Date _____

SKILL: Identify spatial figures: rectangular prism, triangular prism, triangular pyramid, and square pyramid

Directions: Name each shape and give the number of faces, edges, and vertices for each shape.

1.

_____
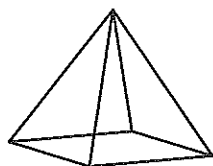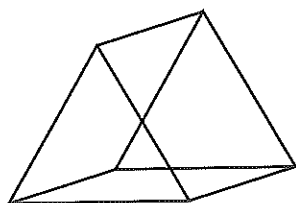
Faces _____

Edges _____

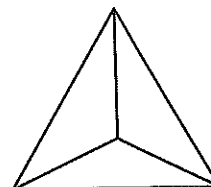Vertices _____

2.

_____
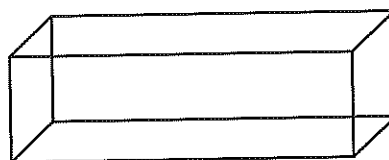
Faces _____

Edges _____

Vertices _____

3.

_____

Faces _____

Edges _____

Vertices _____

4.

_____

Faces _____

Edges _____

Vertices _____

Name: _____

Date _____

SKILL: *Calculate the area of rectangles, triangles, and irregular shapes*
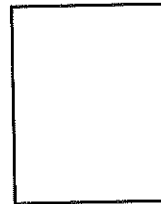
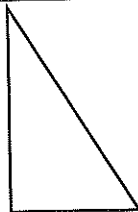Directions: Find the area of each shape below.

1.

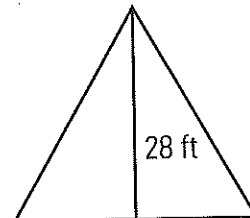15 m

5 m

2.

17 in.

21 in

3.

30 cm

12 m

4.

28 ft

15 ft

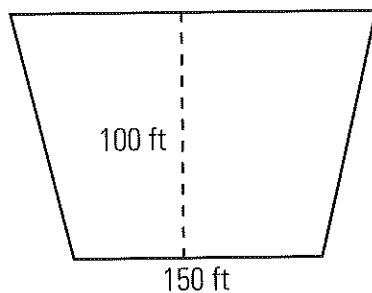**Name:** _____   **Date** _____

SKILL: Calculate the area of rectangles, triangles, and irregular shapes

1. Find the area of the parallelogram: base: 12 inches, height: 9 inches

2. Find the area of the trapezoid: $base_1$: 16 inches, $base_2$: 4 inches, height: 12 inches

3. The government building's floor plan is below. How many square feet are in the building?

330 ft

100 ft

150 ft

Name: _____   Date _____

SKILL: Calculate the volume of rectangular solids

1) Find the volume of a solid 5 meters long, 3 meters wide and 5 meters high.

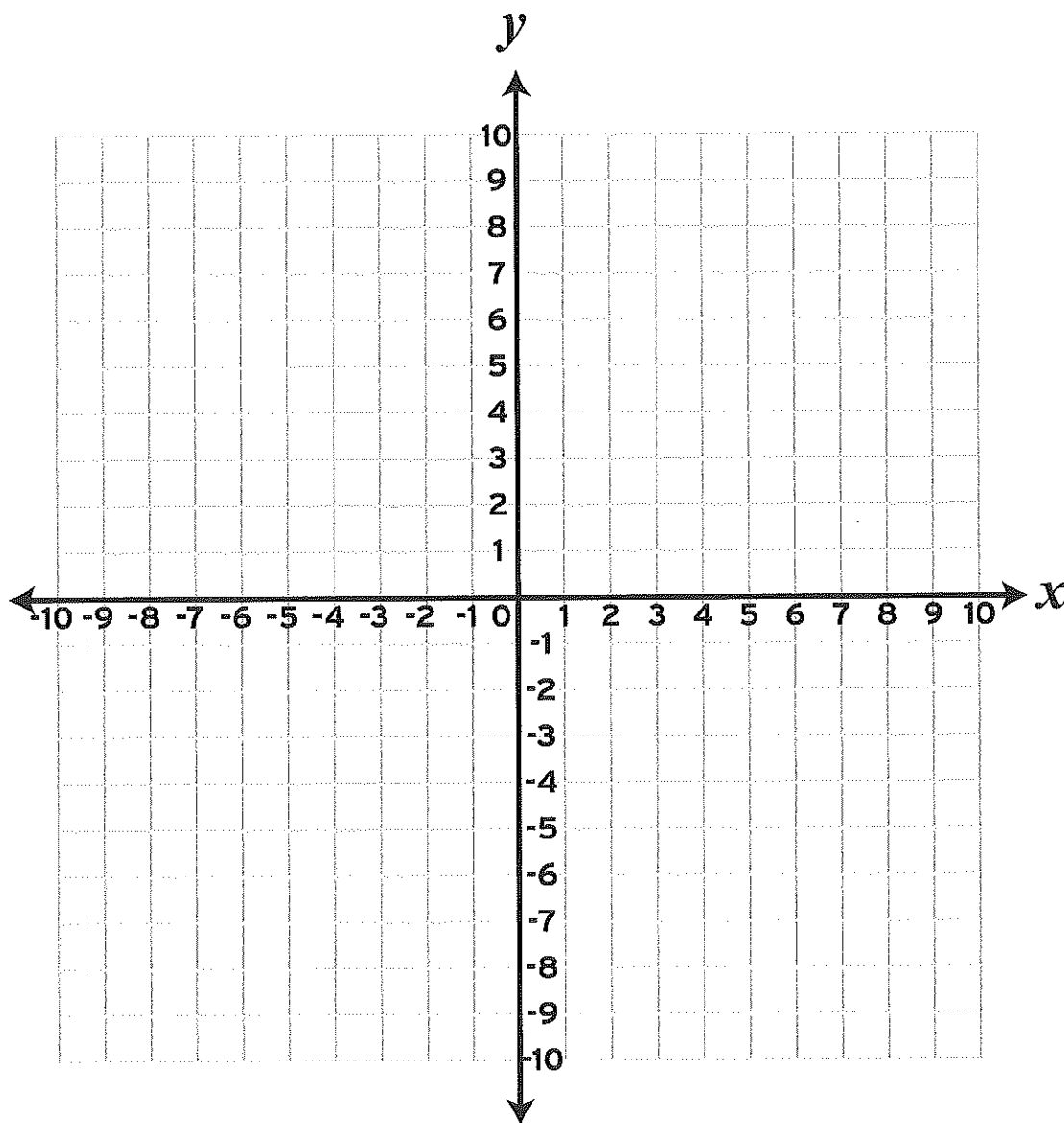2) Find the volume of a solid 10 feet long, 2 feet wide and 3 feet high.

3) Find the volume of a solid 12.5 centimeters long, 1.2 centimeters wide and 1.2 centimeters high.

Name: _____   **Date** _____

SKILL: Understand the four coordinate graph

Directions: Plot the following points in the graph below.

1. (-1, 10)

2. (2, -9)

3. (3, 8)

4. (-4, 7)

5. (-5, -6)

Name: _____   **Date** _____

SKILL: Understand the four coordinate graph

Directions: Give the coordinates of each point.

1) A   _____

2) B   _____

3) C   _____

4) D   _____