

6th



Summer Math Skills Maintenance

Dear Parents,

Summer is nearly here - hooray! While we look forward to a summer of rest and relaxation, we want to ensure that our students do enough math review and practice to keep their skills sharp for the fall! Rather than assigning the same work to every student, we want to make sure there are options that will work for you and your child(ren), and we've provided a list of options below. So, instead of collecting math practice work next fall, we will be collecting a Math Practice Tracker (see reverse) from each student. Just like a summer reading challenge at the local library, the back of this sheet can be used to track progress. For each day that students spend 15-20 minutes doing math, parents should initial and date one of the 20 shapes. When we return to school, the completed sheet can be turned in for a special treat!

Required:

MULTIPLICATION TABLES MEMORIZATION! **ALL STUDENTS** IN OUTGOING GRADES 3 AND UP SHOULD HAVE THE 0-12 MULTIPLICATION TABLES *MEMORIZED* BY SEPTEMBER. THERE MAY BE A SCHOOLWIDE PRIZE SPECIFICALLY FOR THIS!!! Multiplication is *fundamental* to more advanced work in math.

Math Practice Options:

Students in outgoing grades K-7 will receive a hard copy math packet from their current math teacher to complete; this is their primary source for skill review.

For students who finish it and are ready for more – here are some ideas and sources for math practice for all students:

- Flashcards (either printed or online)
- Games (board games and online)
- Review math books - pick one up from Target or even the grocery store!
- Free printable worksheets:
 - a. Math-Aids.com – answers included
 - b. math-drills.com – answers included
 - c. Webmathminute.com
- Online instruction and practice
 - a. Khan Academy – free
 - b. Khan Academy Kids – free app with no ads; for children ages 2-8
 - c. IXL (\$13-\$20 monthly subscription) – targeted concepts
- Games (A search will yield many results. Here's a small sample.)
 - a. MathPlayground.com – developed by a teacher; free
 - b. PuzzlePlayground.com – developed by a teacher; free
 - c. Primary Games. Math Flashcards – free
 - d. BuzzMath - free 30-day trial

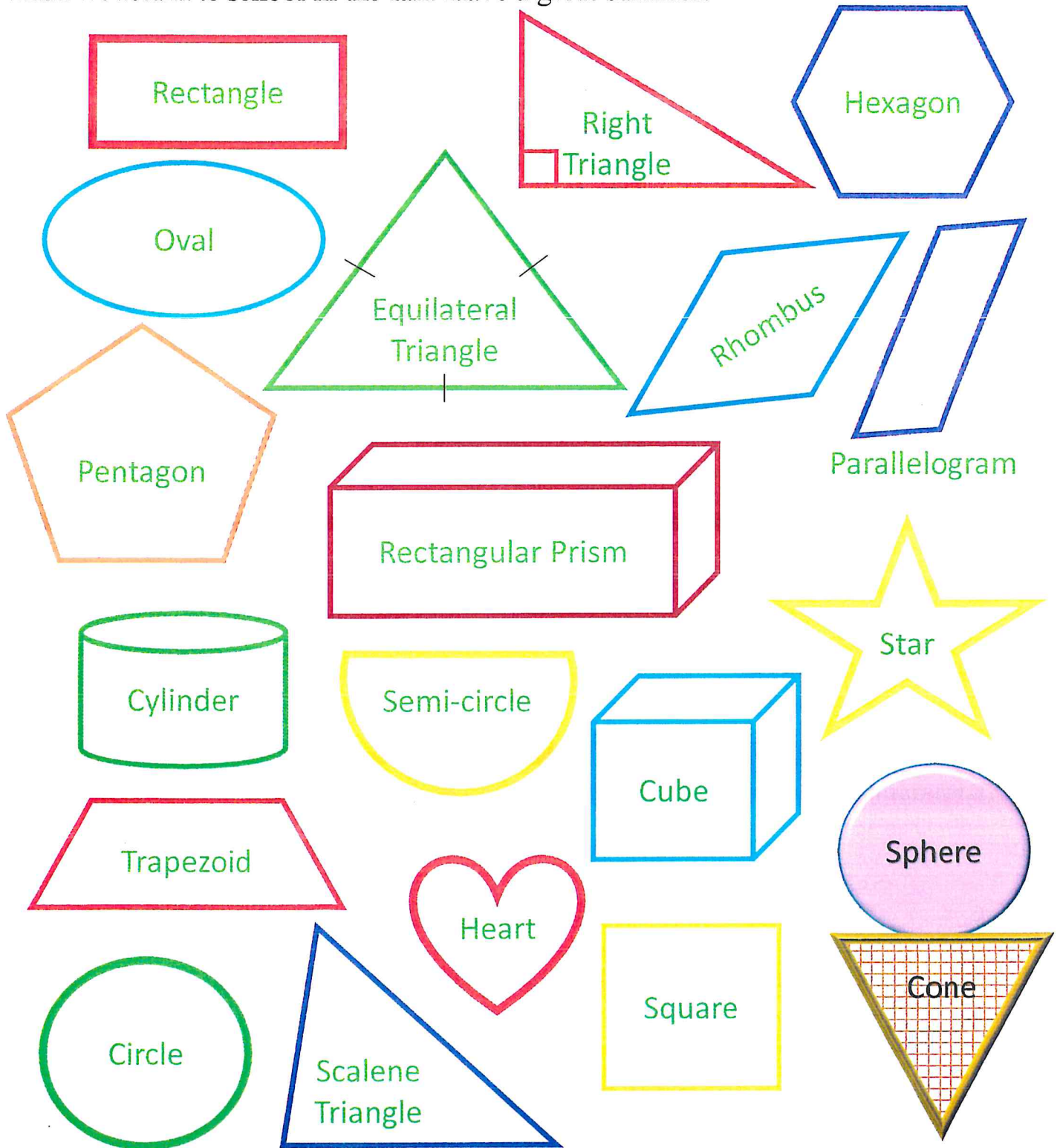
Intentionally incorporating math into daily activities will promote student success in the new school year. Have a wonderful summer!

St. Rita School Summer Math Practice Tracker

Student Name: _____

Rising to Grade: _____

Parents, when your child completes 15-20 minutes of any math activity (ideas are listed on the reverse), initial and date a shape. Work to complete all 20 shapes, ending with the sphere and cone. Students will turn in the fully completed sheet for a treat when we return to school in the fall. Have a great summer!



6th Grade
Summer Review Packet

Instructions

Dear Parents,

Attached is a packet of math review materials for your child to complete over the summer. I have organized it as follows:

- 15 "days" of mixed review problems: Each day has 10 problems that your child should be able to complete in about 15-20 minutes.
- Computation Worksheets: After they complete their 15 "days," or if they complete a "day" in less time than the goal set by the school for summer math practice, they may use the worksheets at the back of the packet for extra computation practice.

If your child completes the entire packet and needs more problems to complete their tracker sheet, you should refer to the suggested options on the tracker sheet for additional materials.

Please note that these packets are not intended to be completed all at once at the very beginning or very end of the summer. Ideally, work on these packets should be spread out over the course of the summer so that your child can best maintain their math skills up until the beginning of next school year. This means they should average 2-3 days of math practice per week.

I hope you have a wonderful summer,

- Mrs. Warren

Day 1

1. Write each ratio in simplest form.

$9 \text{ to } 30 = \underline{\hspace{2cm}}$

$12:18 = \underline{\hspace{2cm}}$

2. Find the equivalent fraction, decimal, and percent.

$$\frac{75}{100}$$

Fraction (in simplest terms): $\underline{\hspace{2cm}}$

Decimal: $\underline{\hspace{2cm}}$

Percent: $\underline{\hspace{2cm}}$

3. $3.9 + 9.1 + 53 =$

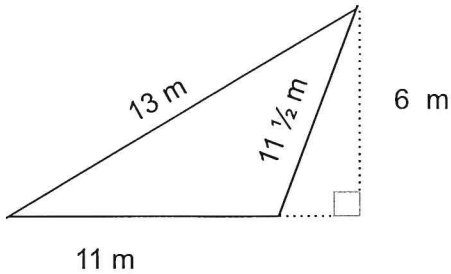
4. $1\frac{5}{6} + 6\frac{1}{9} =$

5. Simplify.

$$2 \cdot 4^2 + (-10 + 4) \div 3 =$$

6. $-15 + (-10) =$

Use the following figure for questions 7 and 8.



7. Find the area.

8. Find the perimeter.

9. Each shelf can hold 15 snow globes. How many snow globes might be displayed on 5 shelves? Write an inequality to represent the number of snow globes. Then graph the inequality.

Inequality: _____



10. Write an equivalent expression using the distributive property.

$6(x - 7) =$

Day 2

1. Complete the ratio table.

x	7		21	28	
y	2	4	6		10

2. Fabric costs \$14 per yard. If you buy 5 yards or more, you get 20% off. How much would 5 yards cost with the discount?

3. $87.3 - 53.5 =$

4. $\frac{7}{8} - \frac{1}{2} =$

5. Solve.

$$28 - 56 =$$

$$-28 - 56 =$$

6. Test Scores:
96, 88, 76, 91, 93, 93

Mean = _____

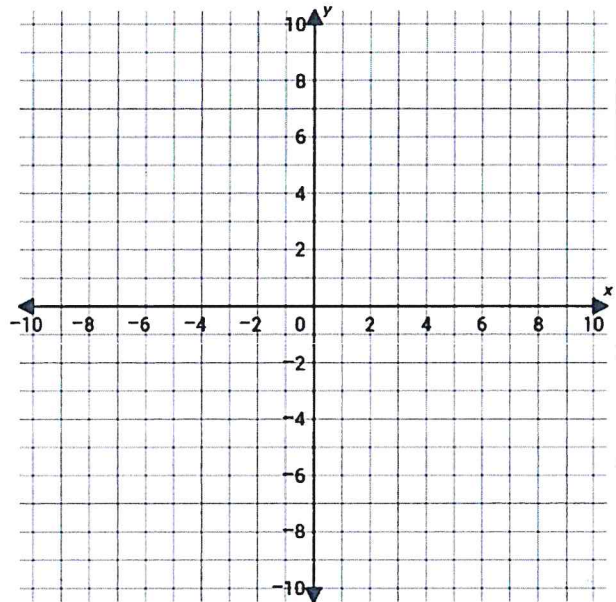
Median = _____

Mode(s) = _____

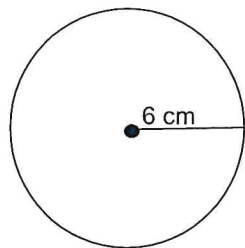
Range = _____

7. Graph the points on the coordinate plane. Then label the polygon formed.

$(-3, 1)$, $(-3, 7)$, $(3, 1)$, $(3, 7)$



8. What is the circumference of the circle? Use 3.14 for π .



Circumference: _____

9. 697 cm = _____ dm

10. Solve.

$$51 = 3k$$

Day 3

1. On a map, 400 miles is represented by 5 inches. Write a ratio for the situation. Then find the unit rate.

Ratio = _____ Unit Rate = _____

2. What is $33\frac{1}{3}\%$ of 54?

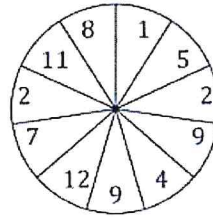
3. $0.6 \cdot 21 =$

4. $\frac{1}{4} \times 16 =$

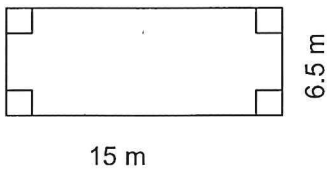
5. $-203 \times 509 =$

6. Use the spinner. What is the theoretical probability of the following event?

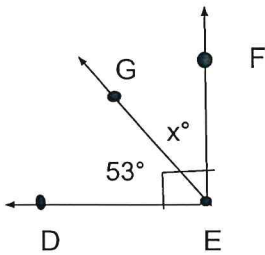
$P(1 \text{ or } 9)$ _____



7. Find the perimeter.

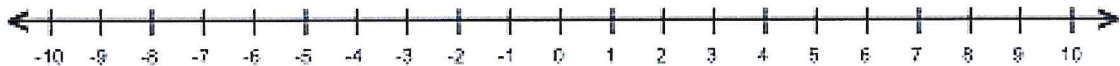


8. Find the value of x . $\angle DEG$ and $\angle GEF$ are complementary angles.
NOTE: not drawn to scale.



9. Graph the solution on a number line. List the first three integer solutions.

$$y > -5 \quad \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}$$



10. List all the factors. Circle the GCF.

36:
60:

List 5 multiples. Circle the LCM.

6:
15:

Day 4

1. Michael has $\frac{3}{4}$ bag of dog food. He sends $\frac{1}{4}$ of the food to doggie daycare with his dog. What part of the bag of dog food is left?

2. A store employee earns a rate of commission of 8%.

a. What commission does she earn on sales of \$2000?

b. What are her total earnings if she also has a salary of \$500?

3. $65.8 \div 0.2 =$

4. A. $\frac{4}{5} \div \frac{2}{5} =$

B. $\frac{2}{3} \div \frac{1}{2} =$

5. $-12,896 \div -416 =$

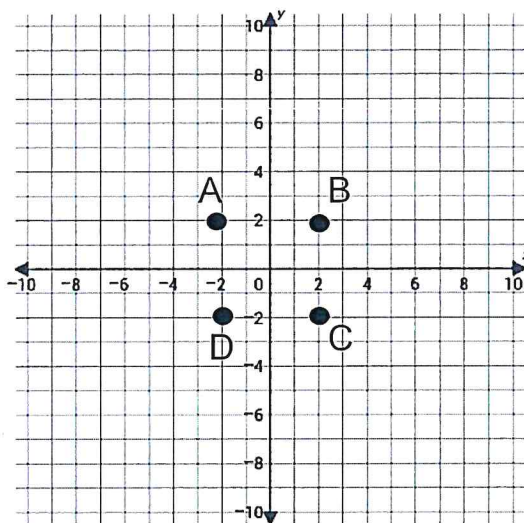
6. Simplify. Show your work.

$$\left(\frac{1}{5}\right)^2 + \frac{1}{5} \div \frac{1}{4} = \underline{\hspace{2cm}}$$

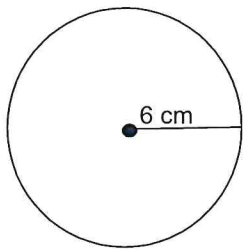
7. Name the point located at the following coordinates:

A. (-2, 2)

B. (2, -2)



8. What is the area of the circle? Use 3.14 for π .



9. 3 pints = _____ cups

10. Solve.

$$h + (-5) = -17$$

Day 5

1. 64 feet in 2 seconds Unit Rate: _____

2. Find the equivalent fraction, decimal, and percent.

$\frac{6}{15}$ Fraction (in simplest terms): _____

Decimal: _____

Percent: _____

3. Order from least to greatest.

5.1 4.987929 5.0999 5.010 50.1

_____ , _____ , _____ , _____ , _____

4. Order from least to greatest.

$2\frac{3}{8}$, $2\frac{1}{4}$, $\frac{21}{8}$

_____ , _____ , _____

5. Complete the Table.

Integer	Absolute Value
-3	
7	
	8

6. Number of people in a restaurant:

25, 30, 40, 25, 50, 40

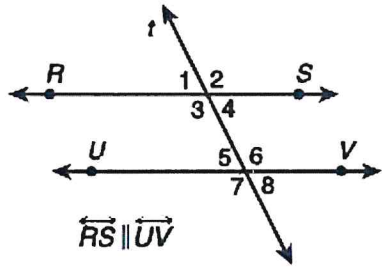
Mean = _____

Median = _____

Mode(s) = _____

Range = _____

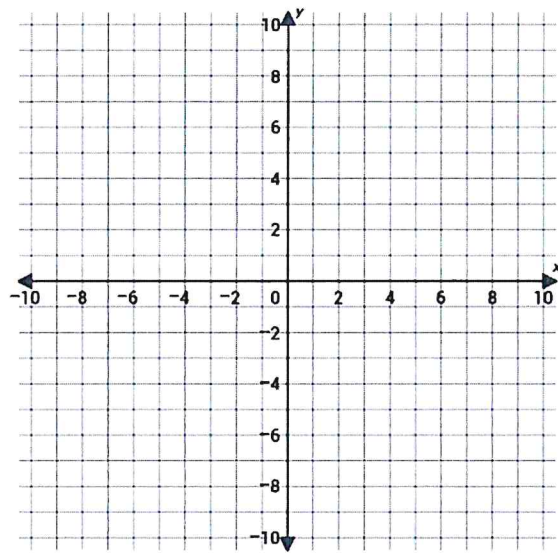
Use the diagram below to answer question 7.



7. If $\angle 8$ measures 45° , what is the measure of $\angle 5$? _____

8. Graph the points on the coordinate plane. Then label the polygons formed.

$(-4, -4), (4, -4), (-2, -8), (2, -8)$



9. Carlos has 7 boxes. Each box can hold no more than 8 notebooks. What might be the total number of notebooks that are in 2 boxes? Write an inequality and then graph the solution.

Inequality: _____



10. Solve.

$$\frac{y}{5} = 24$$

Day 6

1. Write each ratio in simplest form.

$24 \text{ to } 28 = \underline{\hspace{2cm}}$

$12 : 30 = \underline{\hspace{2cm}}$

2. Find the equivalent fraction, decimal, and percent.

$$\frac{15}{24}$$

Fraction (in simplest terms): $\underline{\hspace{2cm}}$

Decimal: $\underline{\hspace{2cm}}$

Percent: $\underline{\hspace{2cm}}$

3. $0.47 + 0.5 + 0.78 + 0.29 =$

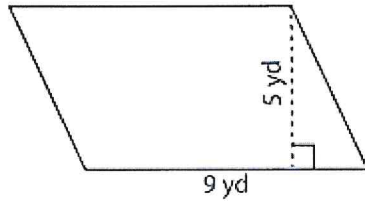
4. $\frac{2}{5} + \frac{5}{6}$

5. Simplify.

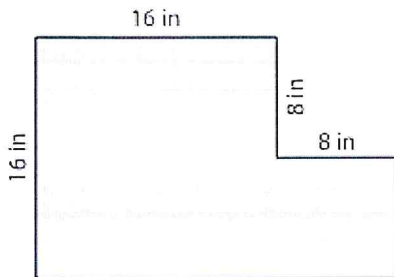
$$\frac{1}{2} (12 + 8) \cdot 5^2 - 17 = \underline{\hspace{2cm}}$$

6. $-56 + 23 =$

7. Find the area.

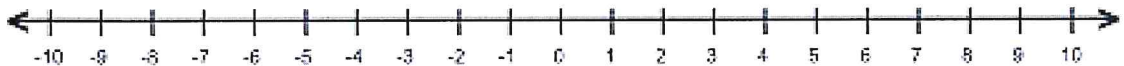


8. Find the perimeter.



9. Graph the solution of the inequality below on a number line and then list the first three integer solutions.

$y \leq 1$ _____ , _____ , _____



10. Write an equivalent expression using the distributive property.

$\frac{1}{3}(\frac{1}{7} + \frac{2}{7}) =$

Day 7

1. Complete the ratio table.

x	5	10	15	20	25
y		6	9		

2. You pay 7% sales tax on a \$124 purchase. How much do you pay in all?

3. $10.43 - 4.921 =$

4. $5\frac{1}{8} - 2\frac{1}{3} =$

5. Solve.

$$75 - 25 =$$

$$75 - (-25) =$$

6. Data: 5, 6, 7, 7, 9, 10, 12, 16

Mean = _____

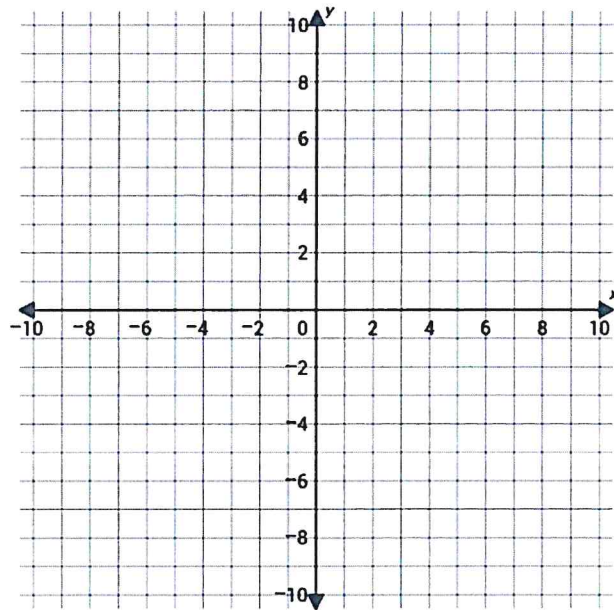
Median = _____

Mode(s) = _____

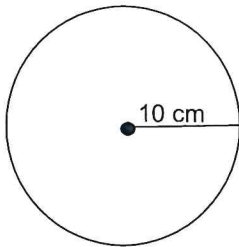
Range = _____

7. Graph the points on the coordinate plane. Then label the polygon formed.

$(-5, 3)$, $(-3, 6)$, $(5, 0)$, $(-1, 0)$



8. What is the circumference of the circle? Use 3.14 for π .



9. 11 L = _____ mL

10. Solve.

$$\frac{b}{5} = 18$$

Day 8

1. 135 miles in 3 hours

Ratio = _____

Unit Rate = _____

2. What is 30% of 210?

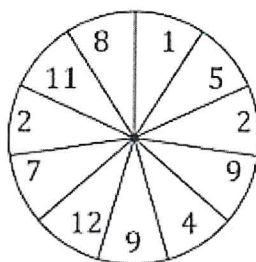
3. $0.2 \cdot 0.4 \cdot 0.6 =$

4. $\frac{2}{9} \times \frac{5}{8} =$

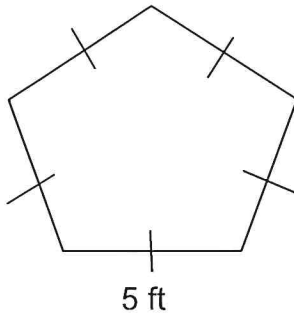
5. $-12 \cdot -5 =$

6. Use the spinner. What is the theoretical probability of the following event?

P (1 or odd number) _____



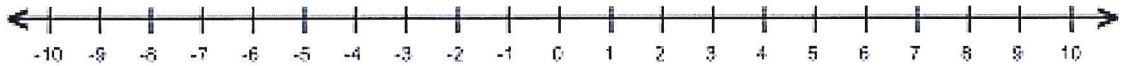
7. Find the perimeter.



8. $\angle ABC$ and $\angle CBD$ form a linear pair. What is the measure of $\angle ABC$ if $\angle CBD$ measures 40 degrees?

9. Graph the solution on a number line. List the first three integer solutions.

$B \geq -1$ _____ , _____ , _____



10. Using a factor tree, factor each number. Then write the GCF.

18:
51:

Day 9

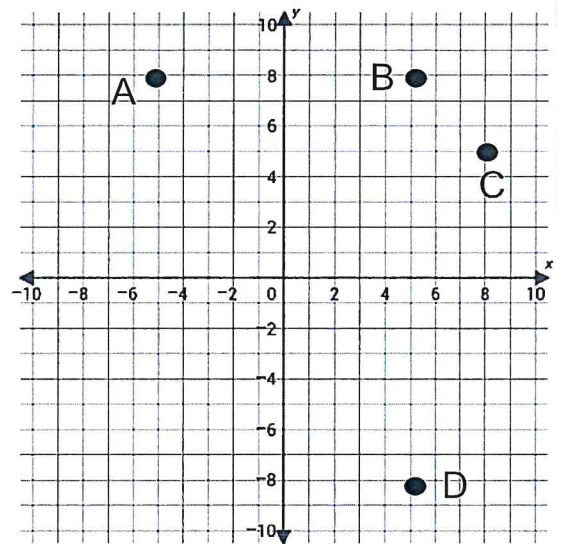
1. How many square yards of carpeting are needed to cover the floor of a rectangular room that is 21 ft long and 12 ft wide?
2. You put \$300 into a bank account earning a 3.2% simple interest rate. If you leave the money in the bank for 5 years,
 - a. how much interest will you earn?
 - b. What will be your final balance?
3. $3.36 \div 0.8 =$
4. $2\frac{2}{5} \div 4 =$
5. $-54 \div 9 =$

6. Simplify. Show your work.

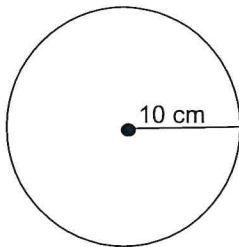
$$10 - 2^3 (3) =$$

7. Name the point located at the following coordinates:

- A. (5, 8)
- B. (8, 5)



8. What is the area of the circle? Use 3.14 for π .



9. 50 oz = _____ lb _____ oz

10. Solve.

$$m + 384 = 212 + 428$$

Day 10

1. A mechanic does 6 oil changes in 2 hours. How many oil changes can the mechanic do in 8 hours? What is the unit rate?

2. Find the equivalent fraction, decimal, and percent.

$$\frac{35}{40}$$

Fraction (in simplest terms): _____

Decimal: _____

Percent: _____

3. Order from least to greatest.

3.2 3.21 3.0259 3.01 3.30

_____ , _____ , _____ , _____ , _____

4. Order from least to greatest.

$$\frac{3}{8}, \quad \frac{15}{24}, \quad \frac{1}{2}$$

_____ , _____ , _____

5. $-|-3| =$

6. Data: 70, 90, 80, 75, 75

Mean = _____

Median = _____

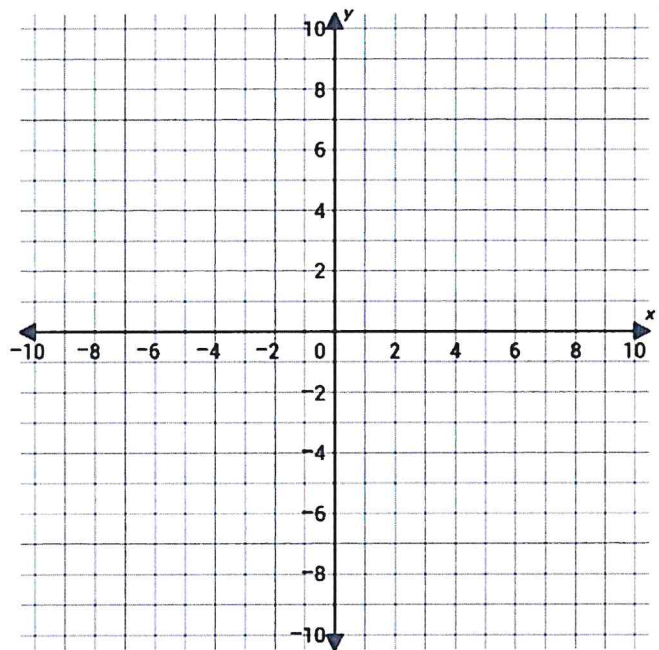
Mode(s) = _____

Range = _____

7. Two angles are supplementary. If one angle measures 60 degrees, what does the other angle measure?

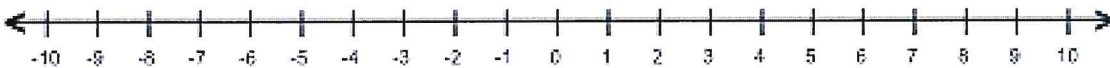
8. Graph the points on the coordinate plane. Then label the polygons formed.

$(-5, 1)$, $(7, 3)$, $(2, -4)$



9. Graph the following inequality.

$$x \leq -3$$



10. Solve.

$$x + 74.68 = 112.3$$

Day 11

1. A recipe calls for 10 oranges, 6 lemons, and 3 limes. Write the following ratios in simplest form.

a. Oranges to limes _____ : _____

b. Lemons to oranges _____ : _____

c. Limes to lemons _____ : _____

2. Find the equivalent fraction, decimal, and percent.

$$\frac{6}{18}$$

Fraction (in simplest terms): _____

Decimal: _____

Percent: _____

3. $0.2 + 0.982 + 8 =$

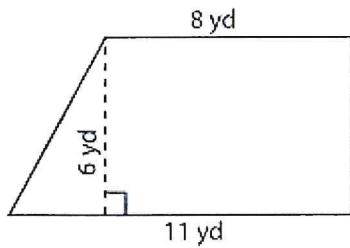
4. $7\frac{3}{8} + 5\frac{2}{3} =$

5. $-24 + 16 =$

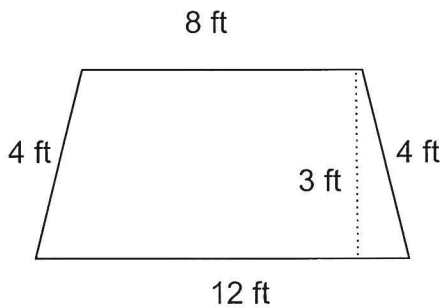
6. Simplify.

$$6^2 + 7 - (3 \cdot 6) = \underline{\hspace{2cm}}$$

7. Find the area.



8. Find the perimeter.



9. A window cleaning service charges under \$75 to clean all of the windows of a house. Write an inequality to represent the amount charged. Then graph the solution.

Inequality: _____



10. Write an equivalent expression using the distributive property.

$$6(x - 10)$$

Day 12

1. Complete the ratio table.

x			18		30
y	7				35

2. You have a \$45 dinner bill. How much tip do you leave if you tip 15%?

3. $65.9 - 45.902 =$

4. $8 - 2\frac{3}{8}$

5. Solve.

$$-36 - (-20) =$$

6. Nightly low temperatures ($^{\circ}\text{F}$):
24, 27, 18, 39, 30, 31, 34

Mean = _____

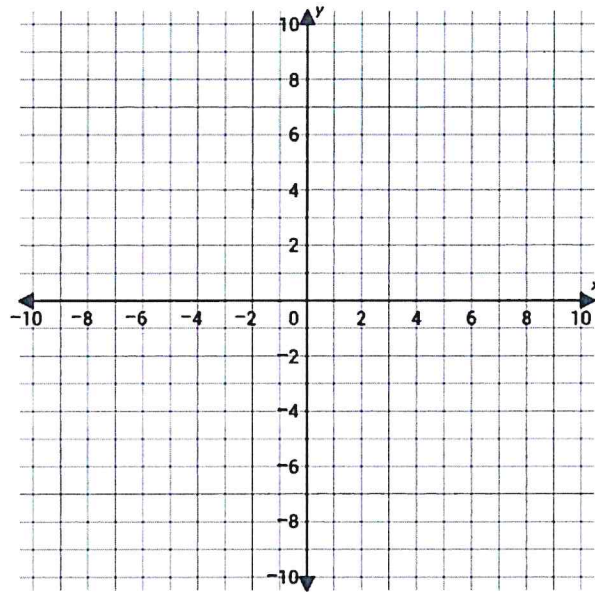
Median = _____

Mode(s) = _____

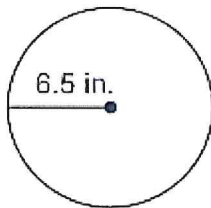
Range = _____

7. Graph the points on the coordinate plane. Then label the polygon formed.

$(-4, 2)$, $(-8, 2)$, $(-6, 9)$



8. What is the circumference of the circle? Use 3.14 for π .



9. Compare. Write $<$, $>$, or $=$.

70 L _____ 7000 mL

10. Solve.

$$12.67 + x = 26.3$$

Day 13

1. Three comic books cost \$12. Mike spends \$20 on comic books. How many comic books does he buy?

2. What is 75% of 52?

3. $7.852 \times 4.6 =$

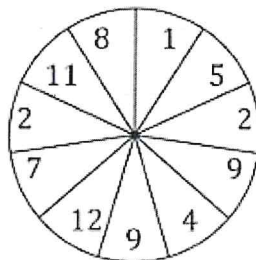
4. $4\frac{1}{6} \times 1\frac{2}{3} =$

5. Solve.

$$3 \cdot (-5) =$$

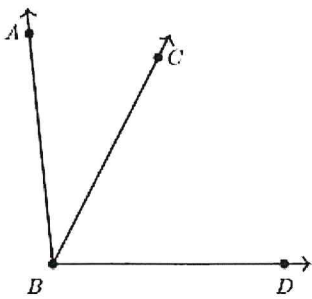
6. Use the spinner. What is the theoretical probability of the following event?

$P(2)$ _____



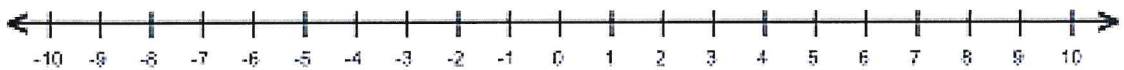
7. Find the width of rectangular shaped field with a length of 24 yards and a perimeter of 78 yards.

8. Find the measure of $\angle ABC$.
 $m \angle ABD = 96$ degrees
 $m \angle CBD = 63$ degrees



9. Graph the solution on a number line. List the first three integer solutions.

$$x > -10 \quad \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}$$



10. Using a factor tree, factor each number. List all the factors. Circle the GCF.

18:
27:

List 7 multiples. Circle the LCM.

5:
6:

Day 14

1. A telephone booth that is 8 ft tall casts a shadow that is 4 ft long. Find the height of a lawn ornament next to the telephone booth that casts a 2 ft shadow.

2. You scored a 95% on your last math test. If there were 40 problems, how many did you get correct?

3. $30.6 \div 8.5 =$

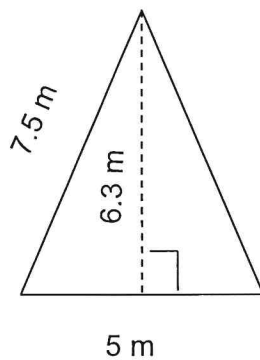
4. $\frac{20}{21} \div \frac{5}{14} =$

5. $-108 \div 9 =$

6. Simplify.

$$3 + 4(7 - 4) - 3^2 =$$

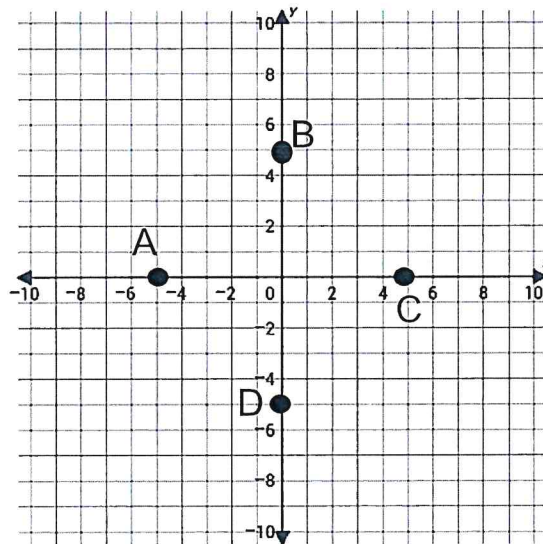
7. Find the area.



8. Name the point located at the following coordinates:

(0, 5)

(5, 0)



9. 1 km = _____ m

10. Solve.

$$-5.2 + h = 93.4$$

Day 15

1. Find each of the unit rates and circle the better buy.

2 for \$3.00 = _____ 3 for \$4.47 = _____

2. Find the equivalent fraction, decimal, and percent.

$$\frac{14}{36}$$

Fraction (in simplest terms): _____

Decimal: _____

Percent: _____

3. Compare. Write $<$, $>$, or $=$.

0.56 _____ 0.560

4. Compare. Write $<$, $>$, or $=$.

$\frac{2}{3}$ _____ $\frac{4}{9}$

5. $|55| =$ _____

6. Data: 52, 59, 73, 59, 62

Mean = _____

Median = _____

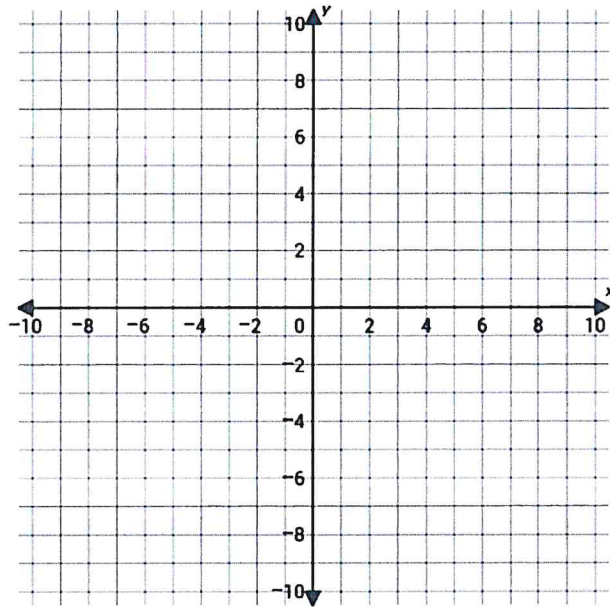
Mode(s) = _____

Range = _____

7. Two angles are complementary. If one angle measures 62 degrees, what is the measure of the second angle?

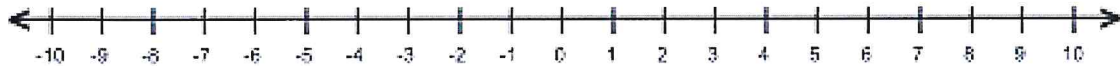
8. Graph the points on the coordinate plane. Then label the polygons formed.

(5, -2), (8, -6), (5, -10), (2, -6)



9. Graph the solution on a number line. List the first three integer solutions.

$$x < -6 \quad \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}$$



10. Solve.

$$3.5x = 38.5$$