

# Math Concepts Problem Set 17

Name \_\_\_\_\_

Assigned Thursday 1/23, due Friday 2/7 (Two weeks due to end of semester)

No Work Shown, No Credit Given

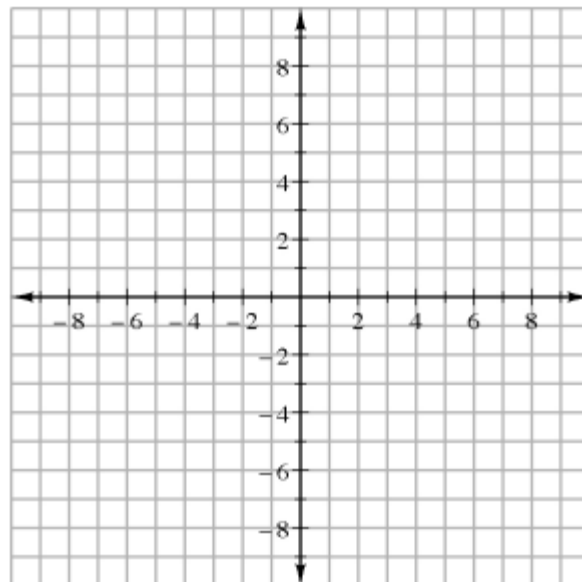
Period \_\_\_\_\_

1. Plot the following points, and connect them in order.

(4, 0), (4, -4), (-6, -4), (-6, 3), (0, 3), (0, 0), and (4, 0).

a) Find the area of your shape, in square units.

b) Find the perimeter of your shape, in units.



2. Find the distance between each pair of points.

a) (2, -9) and (-10, -9)      b) (-8, 6) and (-8, 12)

3. Label the following numbers on the line below.

A)  $\frac{3}{4}$

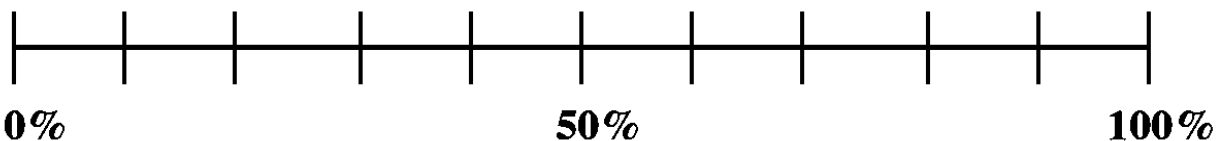
B) 5%

C) 0.6

D)  $\frac{1}{20}$

E) 0.09

F) 65%



4. a) What is the ratio of triangles to circles?

b) What is the ratio of total shapes to triangles?

c) What percent of the shapes are circles?



5. a)  $-3 + 7$

b)  $-10 + -10$

c)  $-8 + 11$

d)  $5 + -12$

e)  $|-12|$

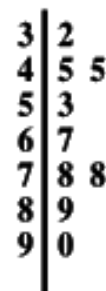
f)  $-|-6|$

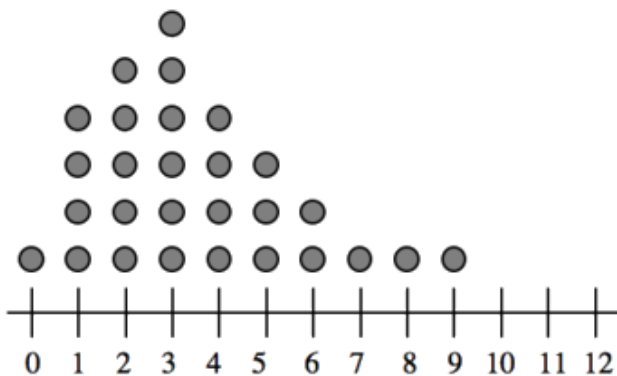
g)  $-(-4)$

h)  $|-4 + -3 + -2|$

6. a) List the numbers in order from the stem and leaf plot to the right.

b) Make a new stem and leaf plot for this data set: 31, 31, 43, 47, 61, 66, 68, 70.





7. Corincia created the dot plot above to show the number of televisions owned by each family on her city block.

- What is the most common number of television sets a family on Corincia's block has?
- How many families live on Corincia's block?
- Do all the families on Corincia's block own a television set? Explain how you know.
- How many families own *more* than 4 television sets?

8. Make a portion web for each number: a) 150%    b)  $\frac{19}{20}$     c) 0.2    d) 2%

9. Complete the ratio table.

Boys	3	6		18
Girls	2		6	

**Please show your work for #10 - 14.**

10. Make a generic rectangle, and find the product.

- $(23)(45)$
- $9 \cdot 142$

11. a)  $800 - 2.92$     b)  $6.3 \div 5$     c)  $1.84 + 42 + 29.1$     d)  $7.7 \div 6$

12. a)  $777\frac{7}{12} + 33\frac{3}{4}$     d)  $2000\frac{5}{8} - 1999\frac{3}{4}$

13. a)  $75^2$     b)  $7^3$     c)  $3^4$     d)  $100^2$

14. Find the shaded area.

