Rational Number War!

* Station 1 *

Directions: Face off against a partner in a game of War! In each round, the greatest number wins! ;)

RULES:

Both players flip a card over. The person who has the greatest value keeps both cards. Continue until one player runs out of cards or time is up. The person with the most cards at the end is the winner!

Declaring War: If both players flip a card that has the same value, they will both play two more cards face down, and then flip over the next card. The person with the greatest value on that card gets to keep all 8 cards!

Riveting Reflections
* Station 2 *

Directions: Follow the directions below! Draw your answers under "Station 2" on your passport.

On coordinate plane #1:

a) Plot and _label_ the points listed below. Then, plot the last ordered pair needed to make a rectangle:

    A (-1, 5)   B (-1, 1)   C (-3, 1)   D _____

b) Reflect this shape across the y-axis, and outline this reflection in RED.

c) Reflect your original shape across the x-axis, and outline this reflection in BLUE.

On coordinate plane #2:

d) Plot three points so that they create a right triangle with an area of 14 square units. LABEL the ordered pairs for each point!

e) Reflect this triangle across the x-axis. Outline the reflection in RED.

On coordinate plane #3:

f) Label all four quadrants. Also, list (+, +), (-, -), (-, +), and (+, -) in the correct quadrants, so we can see what signs the coordinates in each quadrant should have.
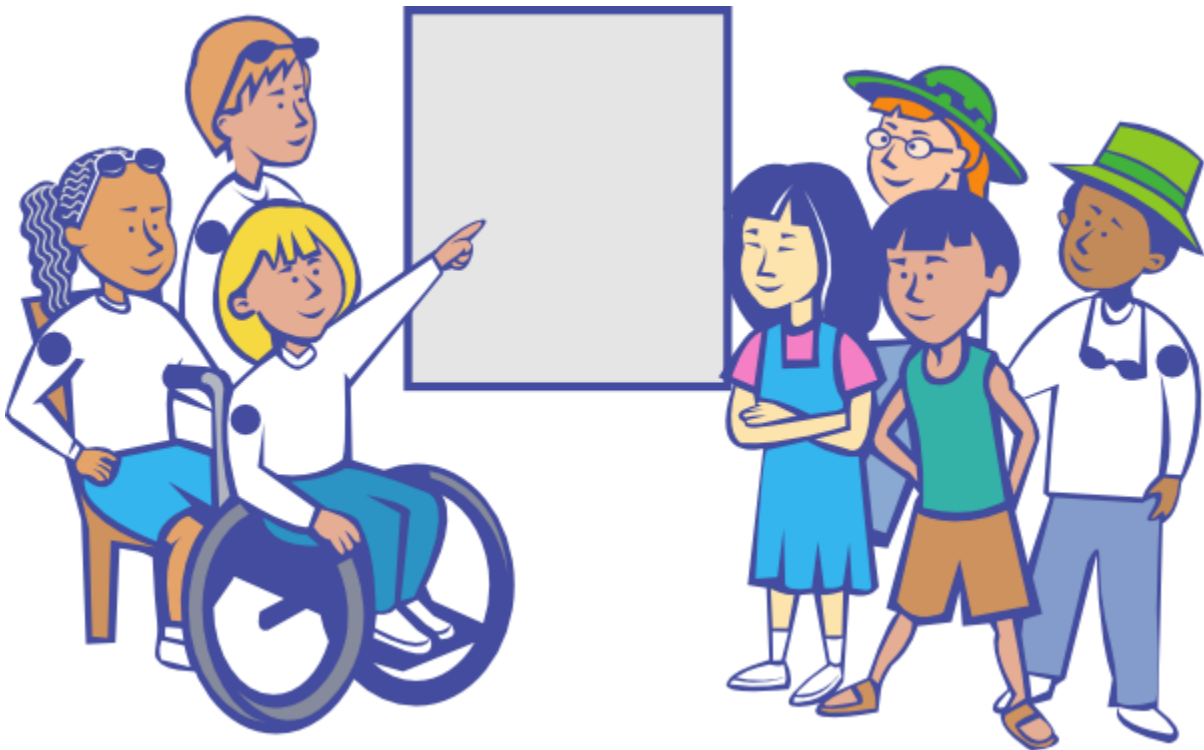

On coordinate plane #4:

g) Create a shape or design that is located in both quadrants 2 & 3.

h) Reflect this shape over the y-axis. Outline this reflection in RED.

Tech Time!

* Station 3 *

Directions: At this station, you will go to the screen (or laptops) and visit the blog. Choose any of the games listed in today's post! Work together, play fairly, and take turns! ☺

Can I have your order, please?

* Station 4 *

Directions: Locate the given numbers on the number line as you remember to order least to greatest from left to right. When finished, you will spell out the answers to the riddles! Write these on your sheet.

What did CINDERELLA say to the CINDERELLA Photographer?

FOLLOW THESE DIRECTIONS:

Find the point on the number line for any point above that point. DEVELOPS!

Each number in point for a point above the number. Then write the letter that stands for that point above. To ANSWER THIS QUESTION, find the correct letter AND SEE WHAT corresponding letter DEVELOPS! KEEP WORKING AND SEE

| 0 | -0.75 | -1 | 1 | 2.33 | -0.33 | -2⅛ | 2⅛ | 1 | -2⅓ | -2.5 | 0.5 | -1.25 | 2.75 | 1.5 | -2¾ | 1¼ | -1½ |

a·fine·line

DIRECTIONS:

Below you see pairs of letters and numbers. Write each letter above the number line at the point that corresponds to its number. A special message will appear!
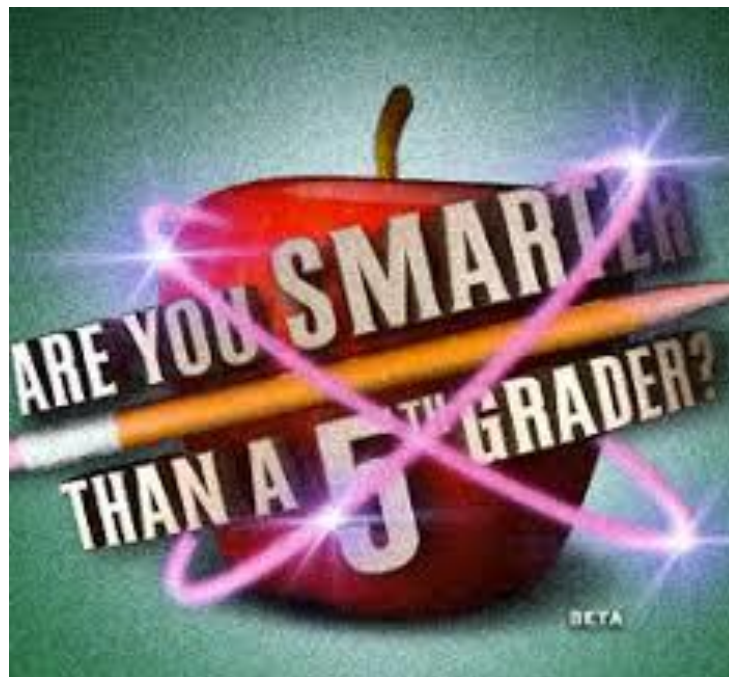
Number line from -9 to 9.

R $-2\frac{1}{2}$	S 0	
H $6\frac{1}{2}$	T $4\frac{1}{2}$	
M -6	N -5	
A $-3\frac{1}{2}$	A $\frac{1}{2}$	
H $2\frac{1}{2}$	O 7	
F $-8\frac{1}{2}$	L -8	

O 4	E 2	
A -7	I $-5\frac{1}{2}$	
W $-1\frac{1}{2}$	O $-1\frac{1}{2}$	
T 8	S $8\frac{1}{2}$	
G $-4\frac{1}{2}$	R -2	
R $1\frac{1}{2}$	S 6	

Are You Smarter than a 5th Grader?

* Station 5 *

Directions: Complete the review problems about Unit 7: Rational Numbers. You may work together and/or use your Math Survival Guide!

Station 5

Write 2 examples of situations that can be represented with a positive number, and 2 examples that can be represented with a negative number.

Positive

1._____

2._____

Negative

3._____

4._____

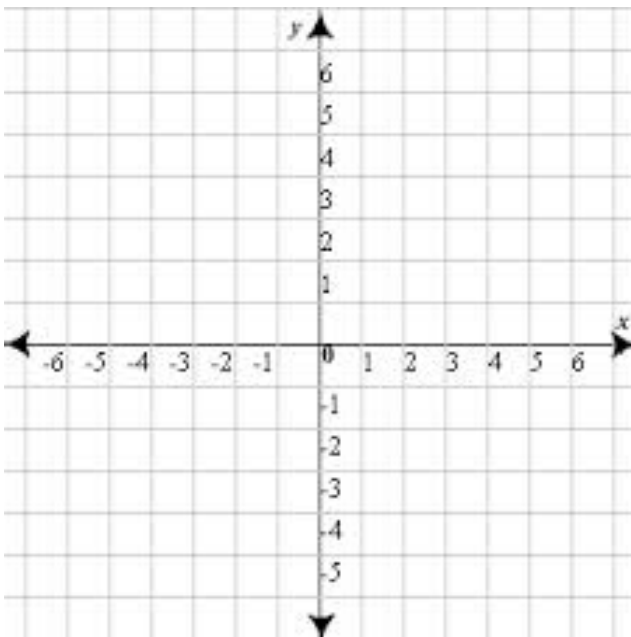**#5-7:** Use <, >, or = to make the following statements true.

5. $|-2|$ _____ $|2|$
6. $\left|-\dfrac{1}{2}\right|$ _____ $\dfrac{3}{4}$
7. $\left|-\dfrac{5}{8}\right|$ _____ $\left|\dfrac{1}{3}\right|$

Find the distance between the following points on a coordinate plane.

8. (-5, 2) and (-5, 6)   _____

9. (3, 4) and (-2, 4)   _____

10. (-3, -2) and (-3, 2)   _____

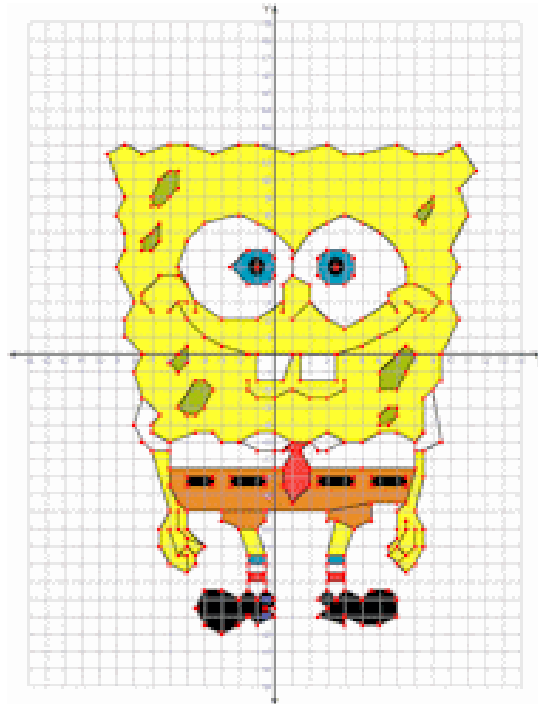11. (6, 4) and (-3, 4)   _____

12. (-4, -2) and (5, -2)   _____

The following ordered pairs represent 3 vertices of a rectangle. Find the coordinates of the 4th vertex. Then, answer the questions.

13. (-2, -3), (2, -3), (2, 5), (_____ , _____)

What is the perimeter?_____

What is the area?_____

14. (5, -2), (6, 4), (6, -2), (_____ , _____)

What is the perimeter?_____

What is the area?_____

Are We There Yet?

* Station 6 *

Directions: Answer the problems about distances and polygons on the coordinate plane. ☺

COORDINATE PLANE DISTANCES

If the points lie in the same quadrant, subtract the absolute values of the appropriate coordinates.
If the points lie in different quadrants, add the absolute values of the appropriate coordinates.

Find the distance between the pair of points.

1. (-3, 1) and (2, 1)

Different quadrants, so add the absolute values.
Horizontal distance from (-3, 1) to y-axis: |__| = __
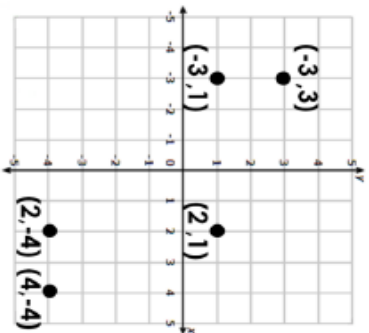Horizontal distance from (2, 1) to y-axis: |__| = __
Distance from (-3, 1) to (2, 1) is __ + __ = __.

2. (-3, 3) and (-3, 1)

Same quadrant, so subtract the absolute values.
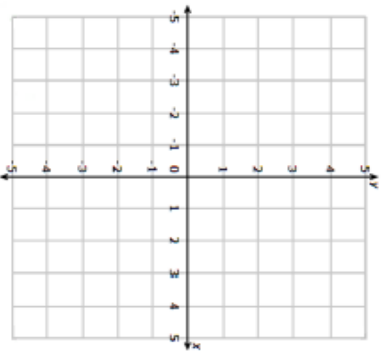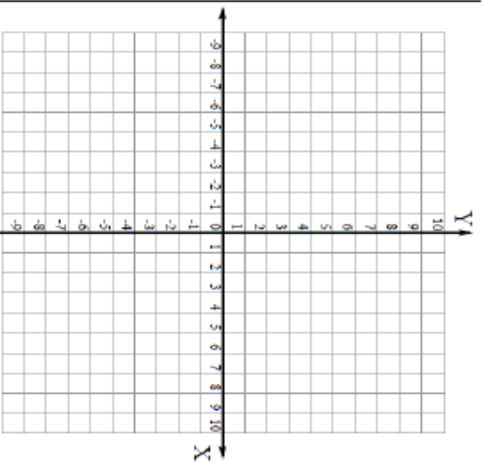Vertical distance from (-3, 3) to (-3, 1):
|__| = __ and |__| = __ so ___ - ___ = ___.

3. (2, 1) and (2, -4) _____ quadrant

4. (2, -4) and (4, -4) _____ quadrant

Plot and label the points on these grids, then find the distance between them.

5. (0, 5) and (0, -5) _____
6. (1, 1) and (1, -3) _____
7. (-2, -5) and (-2, -1) _____

8. (-7, 3) and (5, 3) _____
9. (3, -6) and (3, -10) _____
10. (8, 0) and (8, -8) _____

Find the distance between the pair of points, following the example:

example: (1, 4) and (-3, 4) |1| = 1; |-3| = 3   1 + 3 = 4   4 units

1. (7, -2) and (11, -2) _____
2. (6, 4) and (6, -8) _____
3. (8, -10) and (5, -10) _____
4. (-2, -6) and (-2, 5) _____
5. (-5, 2) and (-5, -4) _____

Write the coordinates of *two* points that are the given distance from these points and horizontal/vertical:

6. 5 units from (-1, -2)   (, -2) and (, -2)
7. 8 units from (2, 4)   (2,) and (2,)
8. 3 units from (-7, -5)   (-7,) and (-7,)
9. 6 units from (4, -1)   (4,) and (4,)
10. 10 units from (-1, 9)   (, 9) and (, 9)
11. 7 units from (-3, 2)   (, 2) and (, 2)

The map shows the location of several areas in an amusement park. Each unit represents 1 kilometer.
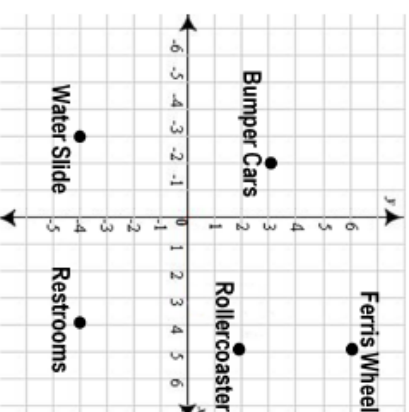
12. How far is the Ferris wheel from the rollercoaster? _____

13. How far is the water slide from the restrooms? _____

14. Which of the following values could be the y-coordinate of the point (10, __) that is 13 units from (10, 6)?
A. 17   B. 3   C. -1   D. -7

15. What is the distance between the points (4, -7) and (-5, -7)?
A. 1 unit   B. 3 units   C. 7 units   D. 9 units

Dominos Review
(similar to Scavenger Hunt)
* Station 7 *

Directions: Complete the review for Unit 7. It is just like the scavenger hunts we have done, but you will arrange them in order. Once they are all done, write down the letter on each card in order. Begin with the one that says "START" at the top. This should spell out an awesome, totally factual statement. ☺
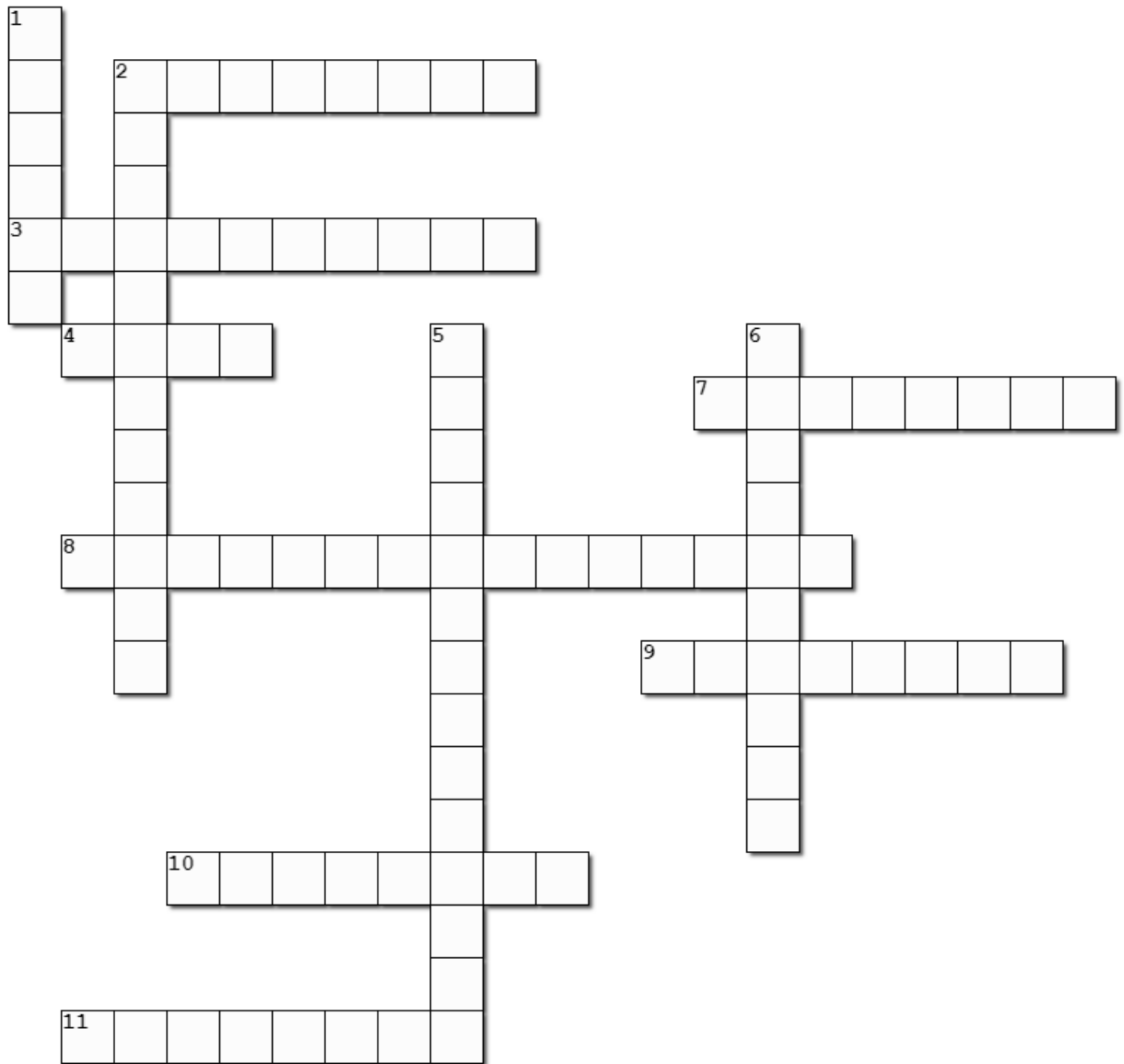

You aren't just a normal kid... you're a Math Ninja!
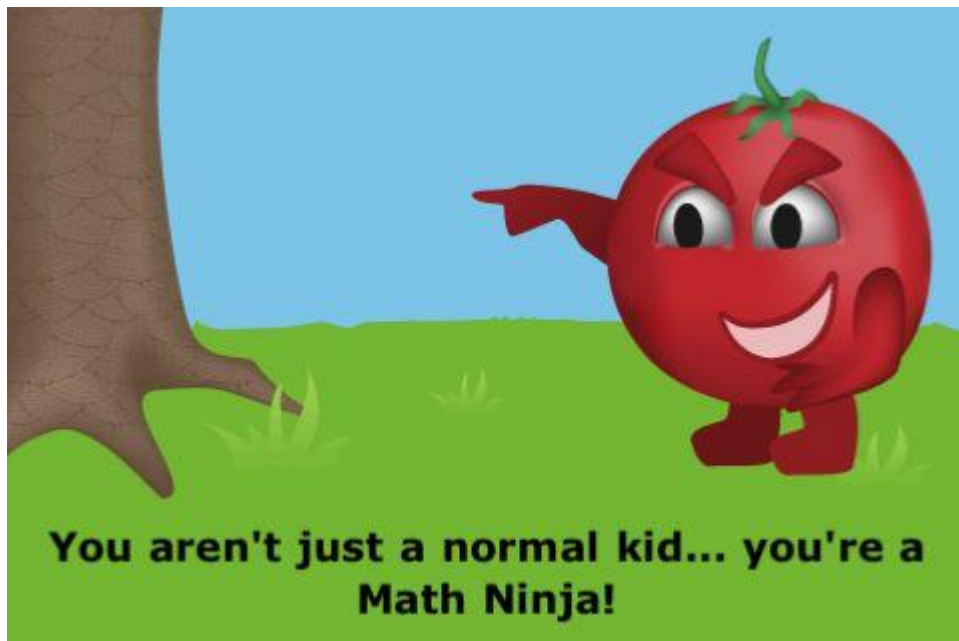
Word Whiz

* Station 8 *

Unit 7 Vocabulary
Complete the crossword below.

Created using TheTeachersCorner.net Crossword Puzzle Maker

Horizontal

2. a number and its _____ are both the same distance from zero; the same numeral, but with different signs

3. a statement comparing values that are 'greater than,' 'less than,' etc.

4. the opposite of zero; the only number that is neither positive nor negative

7. less than zero

8. a number that can be written as a fraction, repeating decimal, or terminating decimal

9. whole numbers and their opposites

10. one of the four sections of the coordinate plane, separated by the x- and y-axes

11. greater than zero

Vertical

1. the location where the x- and y-axis intersect (0, 0)

2. the location of a point on the coordinate plane, including an x- and a y-coordinate

5. the distance from zero

6. a transformation in which a shape or point is 'flipped' across a line

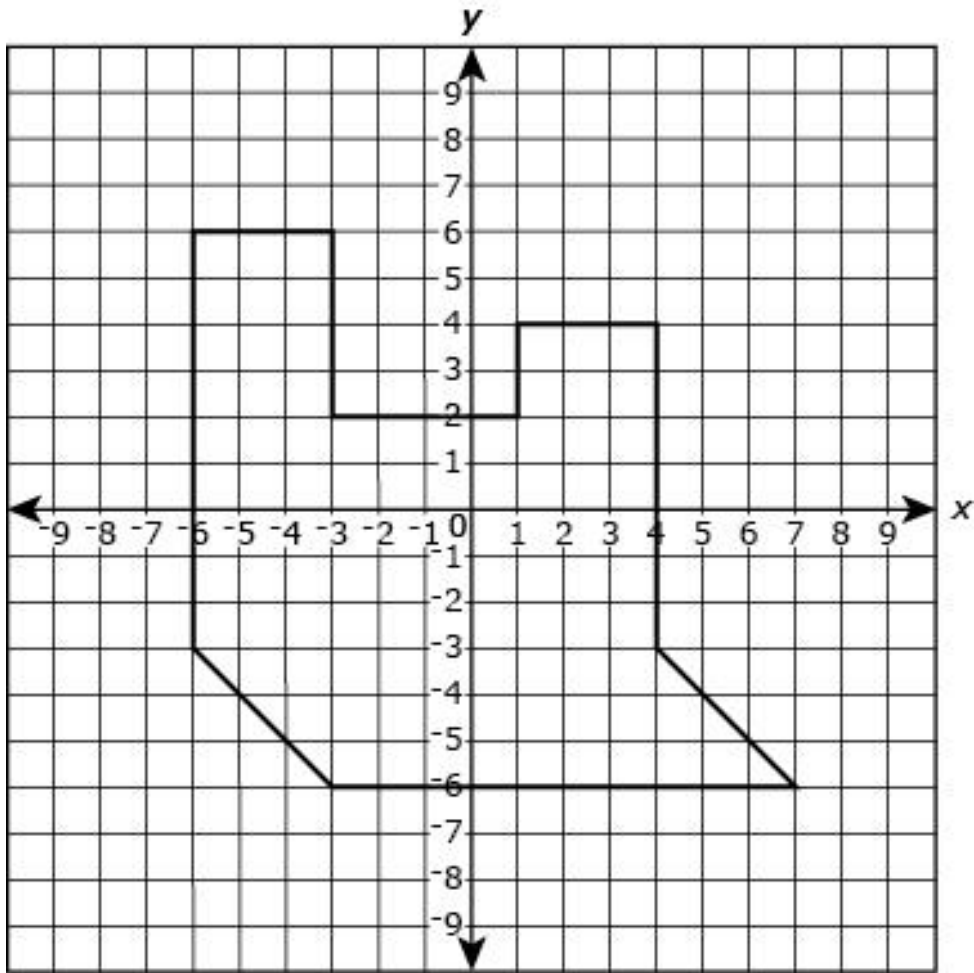*Any term that has 2 words must have a space between the words!*

You Have a Great "Point!"

* Station 9 *

Part A
Label the ordered pairs of ALL 10 vertices.

Part B
a. Clearly decompose the polygon into smaller polygons.
b. Label the base and height of each figure, AND label the area of each one.

Part C
Explain TWO methods that could be used to find the area of the polygon.

1)
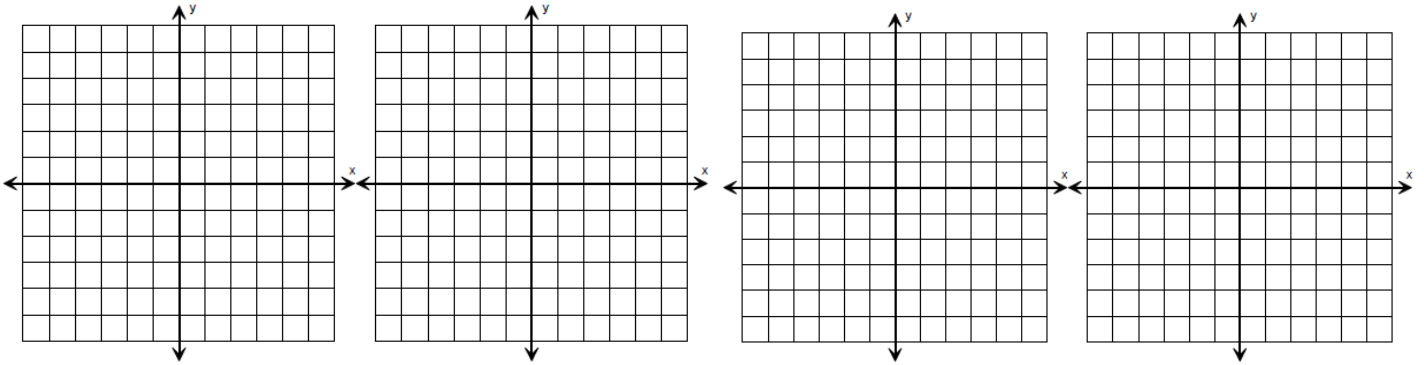
2)

Part D
What is the total area, in square units, of the polygon?

Stations Passport ~ Unit 7

Your Name:_____

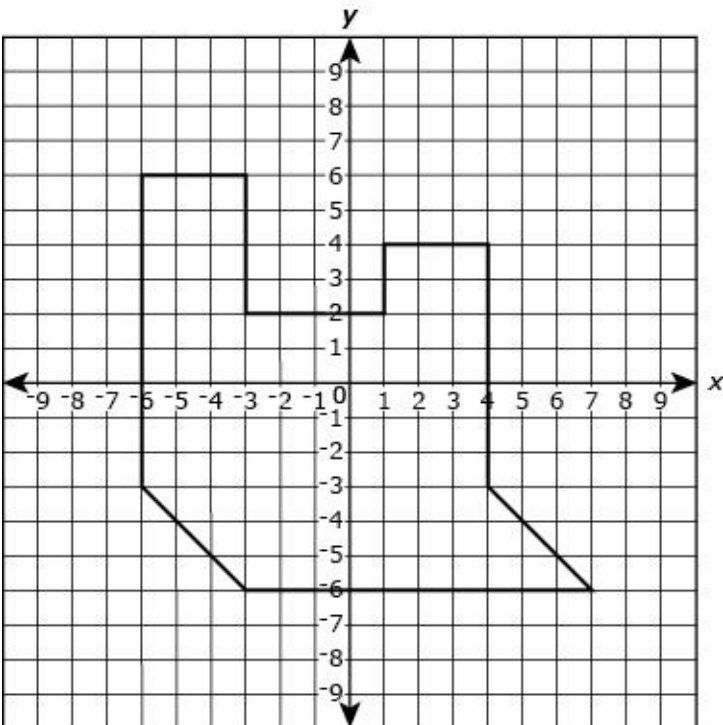Group Members:_____

_____

Station 2:

Station 4:
Riddle1: _____

Riddle 2: _____ _____

Station 7:
Riddle: _____

Station 9:

Complete Parts A & B.

Part C:
1)_____

_____

_____

2)_____

_____

_____

Part D:
_____