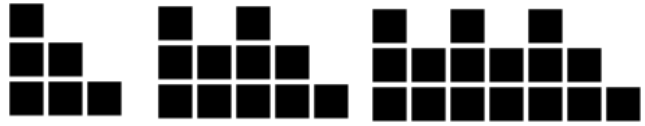


Name(s):

Class Work A



Write two algebraic expressions for the n^{th} figure.

Draw a picture of n^{th} arrangement.

Create a table summarizing the information.
Completely fill the table and mention patterns.

Draw a graph and labels:



Name(s):

Class Work B

An algebraic expression for the n^{th} figure.

$$4x - 3$$

Draw a picture of n^{th} arrangement.

Create a table summarizing the information.
Completely fill the table and mention patterns.

Draw a graph and labels:



Name(s):

Class Work C: Use the given information to fill in the rest

Write two algebraic expressions for the n^{th} figure.

Draw a picture of n^{th} arrangement.

Create a table summarizing the information.
Completely fill the table and mention patterns.

Fig #	# of Tiles
1	5
2	7
3	9
4	11
5	13
6	15
7	17

Draw a graph and labels:



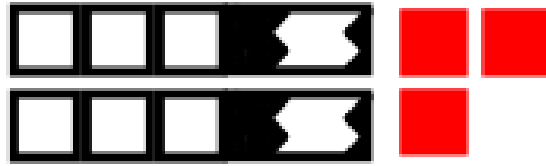
Name(s):

Class Work D Use the given information to fill in the rest

Write two algebraic expressions for the n^{th} figure.

Draw a picture of n^{th} arrangement.

Note: Square tiles are red



Create a table summarizing the information.
Completely fill the table and mention patterns.

Draw a graph and labels:



Name(s):

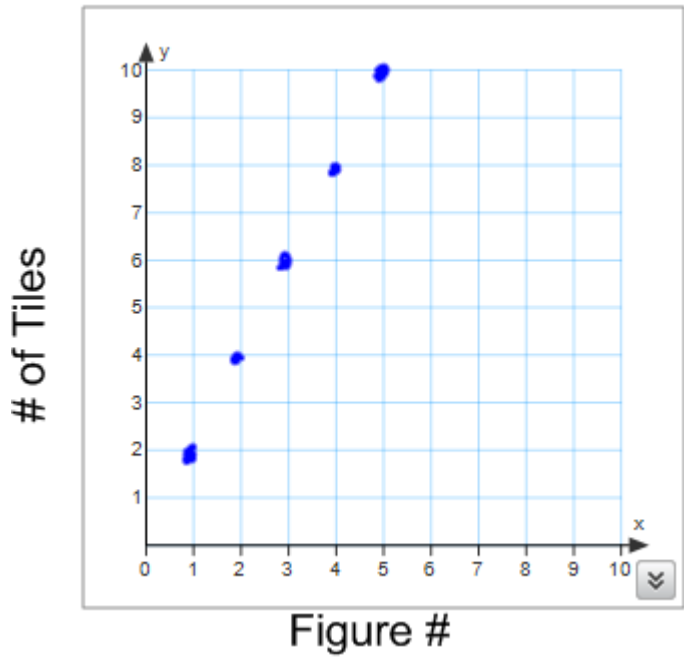
Class Work E Use the given information to fill in the rest

Write two algebraic expressions for the n^{th} figure.

Draw a picture of n^{th} arrangement.

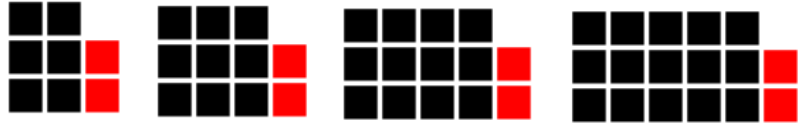
Create a table summarizing the information.
Completely fill the table and mention patterns.

Draw a graph and labels:



Name(s):

Class Work F



Write two algebraic expressions for the n^{th} figure.

Draw a picture of n^{th} arrangement.

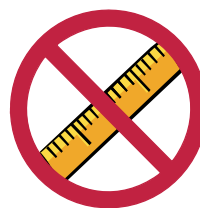
Create a table summarizing the information.
Completely fill the table and mention patterns.

Draw a graph and labels:





Creating Your Number Line



Directions: Create a number line with several different types of numbers. Each number marking must be exact. Be prepared to defend your placement. You are not allowed to use any type of standard ruler and your unit length must be longer than 6 inches.

Number Line must contain:

1. Whole numbers: 0, 1
2. Integers: -1
3. Rational numbers: $\frac{1}{2}$, $\frac{13}{3}$, 20.2
4. Irrational numbers: $\sqrt{5}$, 2π , π , $\frac{1}{2}\pi$



Step 1: Planning/Brainstorming



- a. What is your number line going to look like?
- b. What material would you need?
- c. How are you going to label the numbers?
- d. How are you going to find the numbers?
- e. What is going to be the unit length?

Step 2: Keep a journal of work

- a. Record your progress in any format
- b. How did you figure out what to measure and mark?
- c. What difficulties arose and how did you overcome this?
- d. What went really well?
- e. Advice you might give to someone coming behind?
- f. Things you might change.
- g. What was assumed you knew how to do?
- h. What did you need to learn to do this activity?
- i. Vocabulary words you might want to remember

Step 3: Create the number line with a minimum of 50 numbers

- a. At least 10 numbers in each category.
- b. Create a unit measure divided into subunits
 - a. What are your subunits?
 - b. How would this be useful in making the number line?



Step 4: Share your number line

- a. Measure common items that others might have
- b. How you developed it