

Name: _____

Date: _____

Ms. Napolitano

Activity #: _____

Topic: Inequality
Homework (Day 1.5)

Reading, Writing, and Graphing Inequalities

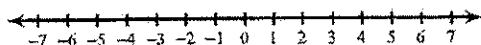
Inequality How do you read it?

①	$x \geq 7$	
②	$N < 2$	
③	$Y > 10$	
④	$A \leq 5$	

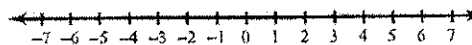
⑤ When you are graphing an inequality with $<$ or $>$, do you use an open circle or closed circle? _____

Graph each inequality below.

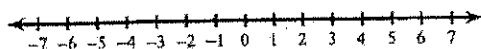
⑥ $x \leq 4$



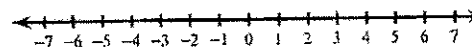
⑦ $n > -5$



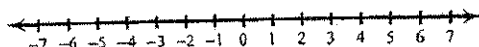
⑧ $x \geq 0$



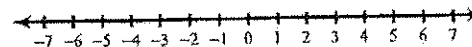
⑨ $r \leq -1$



⑩ $n < 3$

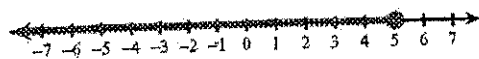


⑪ $x > 4$

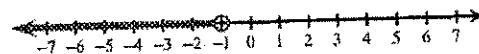


Write an inequality for each graph.

⑫



⑬



Name: _____
Ms. Napolitano

Date: _____
Activity: 6.2

Topic: Equations
Lesson 19

Homework (Day 2) MIT/UCLA

Solve the problems.

- 1 Samantha works part time at a store where she earns \$462.30 each month.

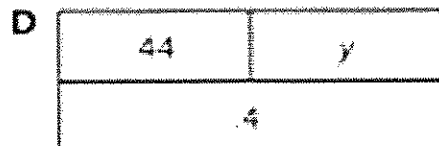
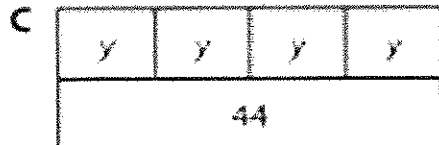
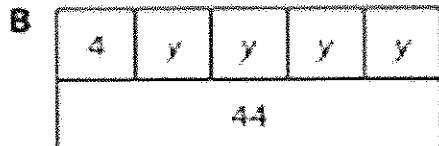
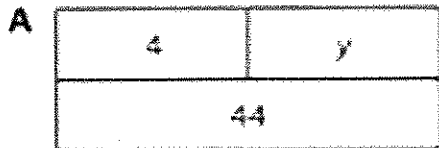
Write an expression that could be used to find the amount Samantha earns working any number of months, m .

Show your work.

Answer: _____

- 2 Kyle spends a total of \$44 for four sweatshirts. Each sweatshirt costs the same amount of money.

Which bar model could be used to show this situation?



Experimental Probability

Name: _____

Measuring the Possibility of an Outcome

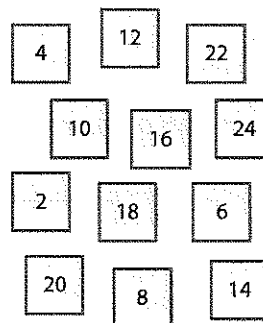
Study the example showing how to describe the probability of an event. Then solve problems 1–11.

Example

Twelve tiles with the even numbers from 2 through 24 are placed in a bag. You draw a tile without looking.

You can describe the probability of various outcomes using words:

- Drawing an odd number is an impossible outcome.
- Drawing a numbered tile is a certain outcome.
- Drawing a prime number is unlikely.
- Drawing a number greater than 12 is as likely as not.
- Drawing a number greater than 6 is likely.



1 Why is drawing a number greater than 6 likely?

2 Why is drawing a prime number unlikely?

Use the tiles from the example to classify each event as *impossible, unlikely, as likely as not, likely, or certain*.

3 Drawing a 4 or an 8. _____

4 Drawing a number less than 20. _____

5 Drawing a number less than 2. _____

6 Drawing a multiple of 2. _____

7 Drawing a number that is a factor of 24. _____

Vocabulary

outcome one of the possible results in a situation or experiment.

event one or more possible outcomes.

probability the chance of an outcome or event occurring.



Find the Experimental Probability

Study the example showing how to find experimental probabilities. Then solve problems 1–8.

Example

Nadine draws one colored cube at a time from a bag. She records the color of the cube before returning the cube to the bag. The table shows her results. Write the experimental probability of each color in words and with a ratio.

Color	Tally	Number of Times Drawn
red		3
yellow		4
blue		5

From the table, you can see that Nadine drew from the bag a total of $3 + 4 + 5 = 12$ times.

$$P(\text{red}) = \frac{\text{number of red cubes}}{\text{number of draws}} = \frac{3}{12}, \text{ or } \frac{1}{4}$$

$$P(\text{yellow}) = \frac{\text{number of yellow cubes}}{\text{number of draws}} = \frac{4}{12}, \text{ or } \frac{1}{3}$$

$$P(\text{blue}) = \frac{\text{number of blue cubes}}{\text{number of draws}} = \frac{5}{12}$$

- 1 In the example above, why is the denominator of each ratio 12?

- 2 Felipe repeats Nadine's experiment and has different results. Based on Felipe's experiment, what is the experimental probability of each color in words and with a ratio?

Color	Tally	Number of Times Drawn
red		2
yellow		3
blue		7

$$P(\text{red}) = \underline{\hspace{2cm}}$$

$$P(\text{yellow}) = \underline{\hspace{2cm}}$$

$$P(\text{blue}) = \underline{\hspace{2cm}}$$

- 3 Look at Nadine's and Felipe's results. Which color is there more of in the bag: red, yellow, or blue? How do you know?



Vocabulary

experimental probability the probability of an outcome or event occurring based on the results of an experiment.



Experimental Probability

Solve the problems.

- 1 Two months ago, a car dealership sold 150 cars. Thirty of the cars were red. Last month, the dealership sold 200 cars. Predict the number of red cars they sold last month.

Show your work.

What do you need to know in order to make a prediction?



Solution: _____

- 2 Carlotta rolls a number cube with faces labeled 1–6. Tell whether each statement is *True* or *False*.

- a. Rolling a number less than 2 is unlikely. True False
- b. Rolling a 4 or a 6 is likely. True False
- c. Rolling an even number is as likely as rolling an odd number. True False

When is an outcome likely?



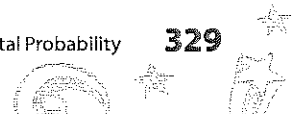
- 3 Ben spins a spinner with four sections labeled X, Y, W, and Z. He gets these results: X, X, X, Y, W, Z. What is the experimental probability that the spinner will *not* stop on Z on the next spin?

- A $\frac{1}{6}$ C $\frac{3}{4}$
 B $\frac{1}{4}$ D $\frac{5}{6}$

How many times did Ben spin the spinner?
 How many Zs did he spin?



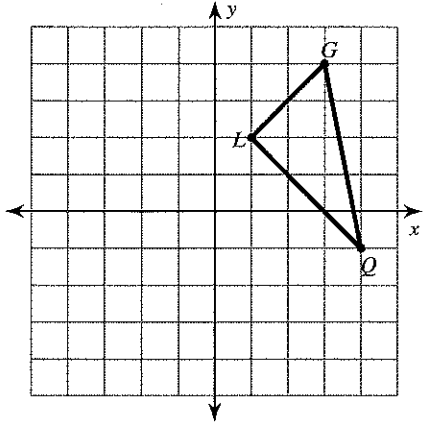
Wayne chose **A** as the correct answer. How did he get that answer?



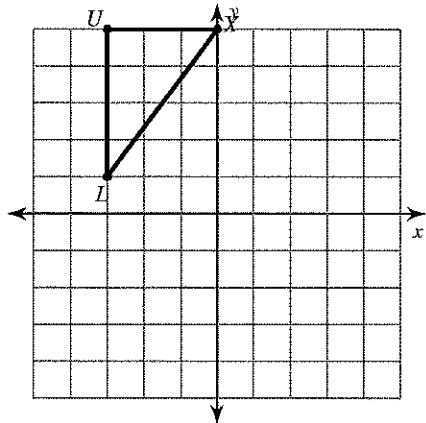
Reflections of Shapes

Graph the image of the figure using the transformation given.

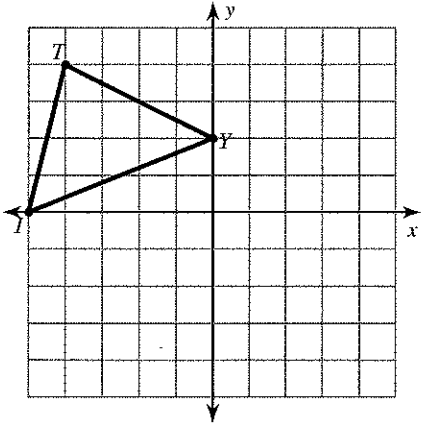
1) reflection across the x-axis



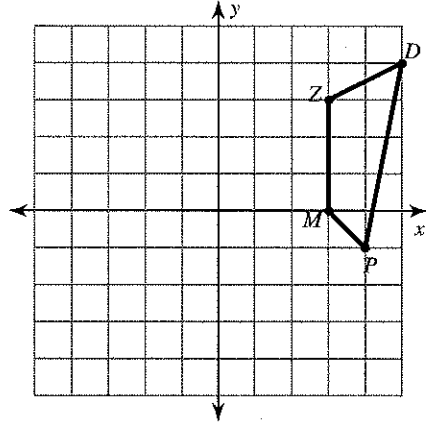
2) reflection across $y = 3$



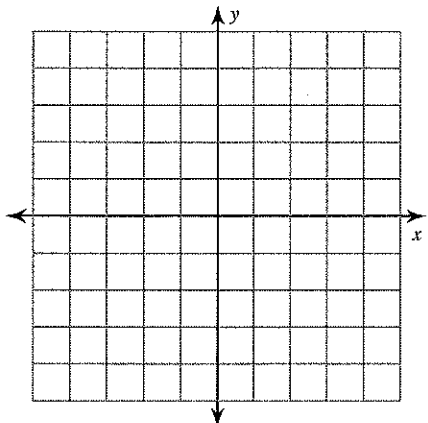
3) reflection across $y = 1$



4) reflection across the x-axis



5) reflection across the x-axis
 $T(2, 2), C(2, 5), Z(5, 4), F(5, 0)$



6) reflection across $y = -2$
 $H(-1, -5), M(-1, -4), B(1, -2), C(3, -3)$

