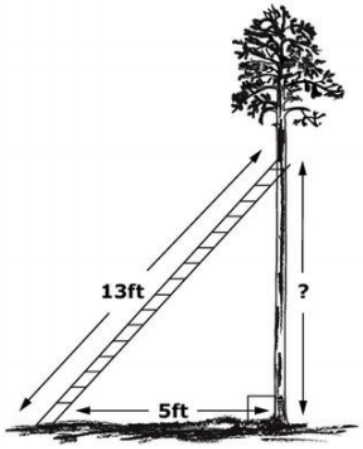
Name:_____Class:_____Date:_____

Smarty Balanced Math Practice II

Here are some more fun practice problems to try on paper!

1816

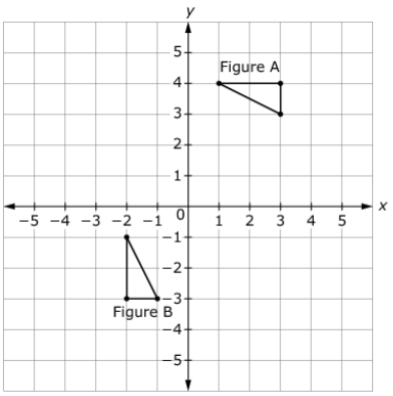
A 13-foot ladder is leaning on a tree. The bottom of the ladder is on the ground at a distance of 5 feet from the base of the tree. The base of the tree and the ground form a right angle as shown.



Enter the distance, in feet, between the ground and the top of the ladder.

1841

Two figures are shown on the coordinate grid.



Show that Figure A and Figure B are congruent by describing a sequence of basic transformations that maps Figure A onto Figure B. In your response, be sure to identify the transformations in the order they are performed.

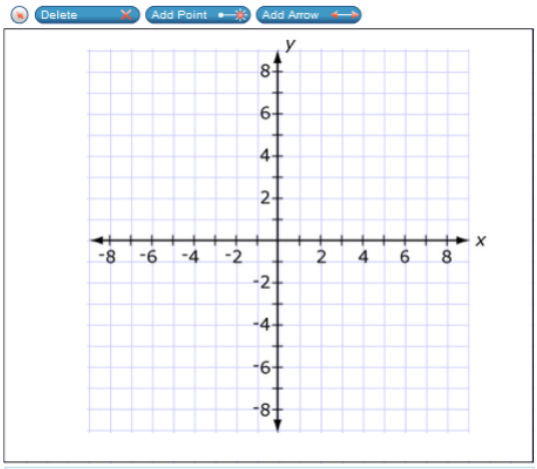
1867

John and Kim wrote down two different functions that have the same rate of change.

John's function is represented by the table shown.

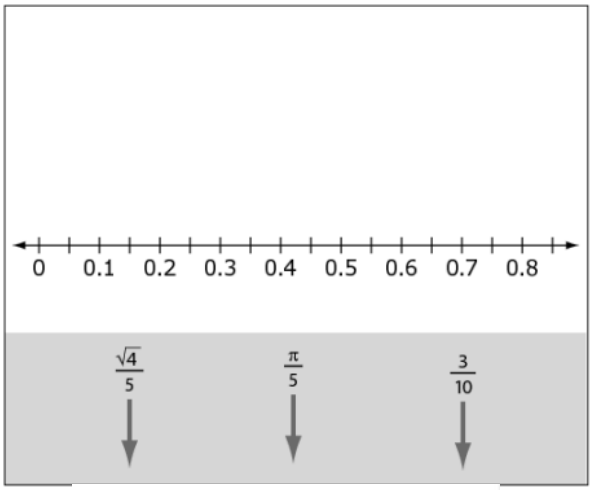
x	y
-1	-5
1	-1
3	3

Use the Add Arrow tool to graph a function that could be Kim's function.



1860

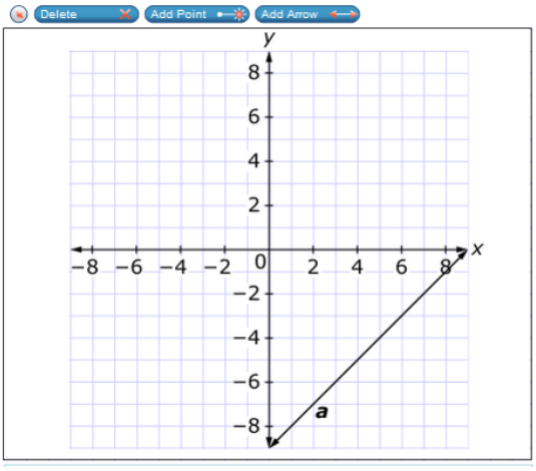
Drag each number to its correct position on the number line.

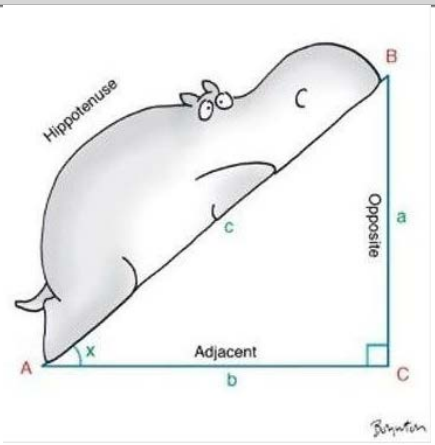


1834

Line *a* is shown on the graph. Use the Add Arrow tool to construct line *b* on the graph so that:

- Line *a* and line *b* represent a system of linear equations with a solution of (7, −2).
- The slope of line *b* is greater than −1 and less than 0.
- The *y*-intercept of line *b* is positive.



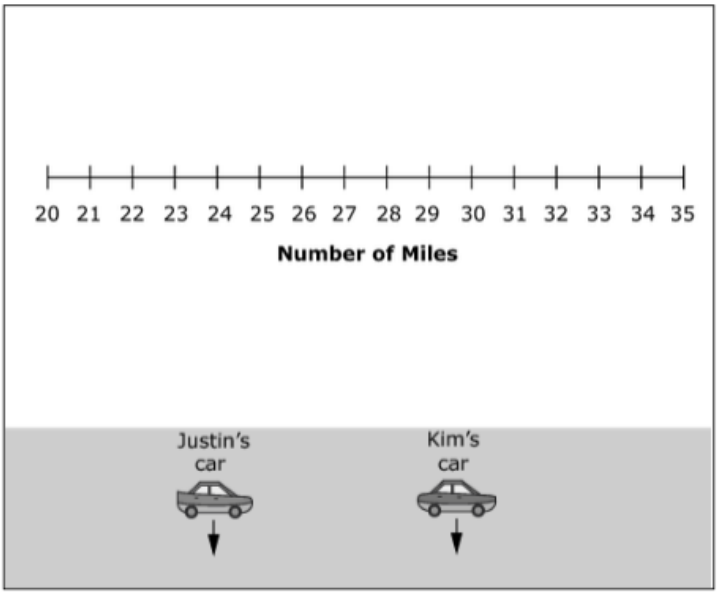


1872

Justin's car can travel $77\frac{1}{2}$ miles with $3\frac{1}{10}$ gallons of gas.

Kim's car can travel $99\frac{1}{5}$ miles with $3\frac{1}{5}$ gallons of gas.

Drag the cars to the number line to show the number of miles each car can travel with 1 gallon of gas.



Six friends are going to buy pizza. Their choices are to buy 2 medium 10-inch diameter pizzas for $7.00 each, or 1 large 14-inch diameter pizza for $15.00. Both prices include tax and tip.

The friends agree that their best choice is the one that gives them the most pizza for their money.

764

Which is the best choice? Explain your answer.

757

Use the Add Arrow tool to graph a system of two equations that has a single solution of $(-2, -3)$.