Warm Up

49 Students were surveyed about book bags. The results are shown below.

	Male	Female
Carry a Book Bag	47	57
Do Not Carry a Book Bag	63	48

A student concluded that, for those in the survey, females are more likely to carry a book bag than males. Which explanation ***best*** supports the student's conclusion?

A For females, 54% carry a book bag, while for males, 43% carry a book bag.

B For females, 27% carry a book bag, while for males, 22% carry a book bag.

C For females, 57 carry a book bag, while for males, 47 carry a book bag.

D For females, 48 do not carry a book bag, while for males, 63 do not.

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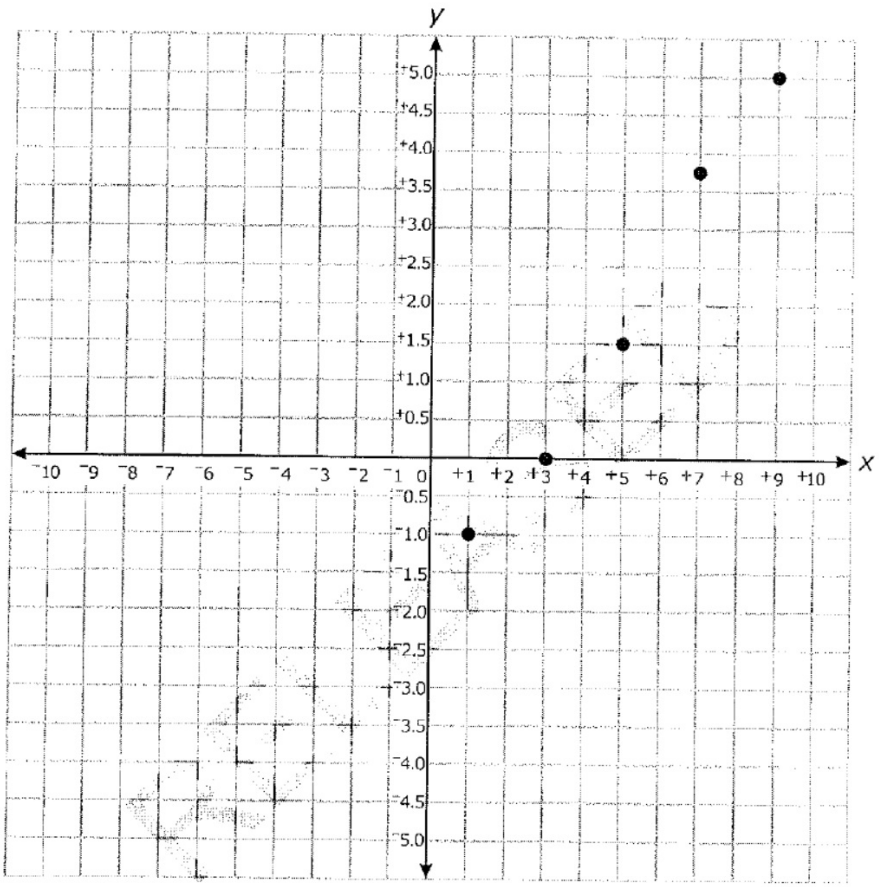
$\frac{57}{105} = .54 = 54\%$ $\frac{47}{110} = .427$ 43%

50 Which equation ***best*** fits the data shown in the scatterplot below?



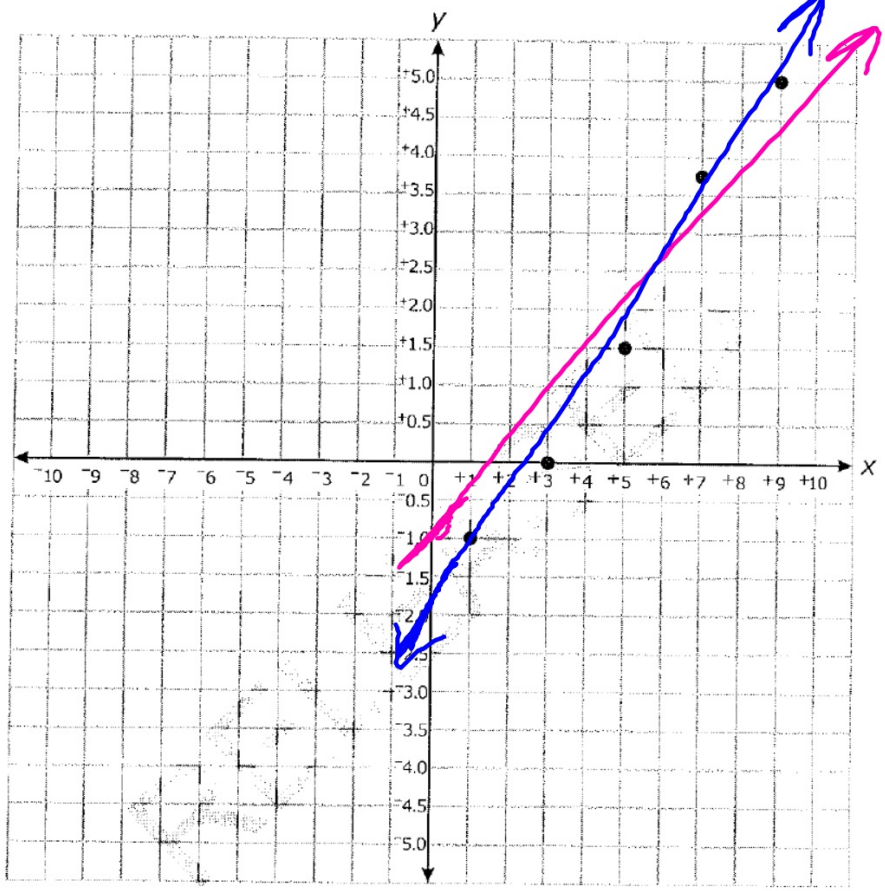
A $y = \frac{1}{4}x - 1$

B $y = \frac{1}{2}x - \frac{1}{2}$

C $y = \frac{3}{4}x - 2$

D $y = x - 3$

50 Which equation ***best*** fits the data shown in the scatterplot below?



y-int.

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B $y = \frac{1}{2}x - \frac{1}{2}$

C $y = \frac{3}{4}x - 2$

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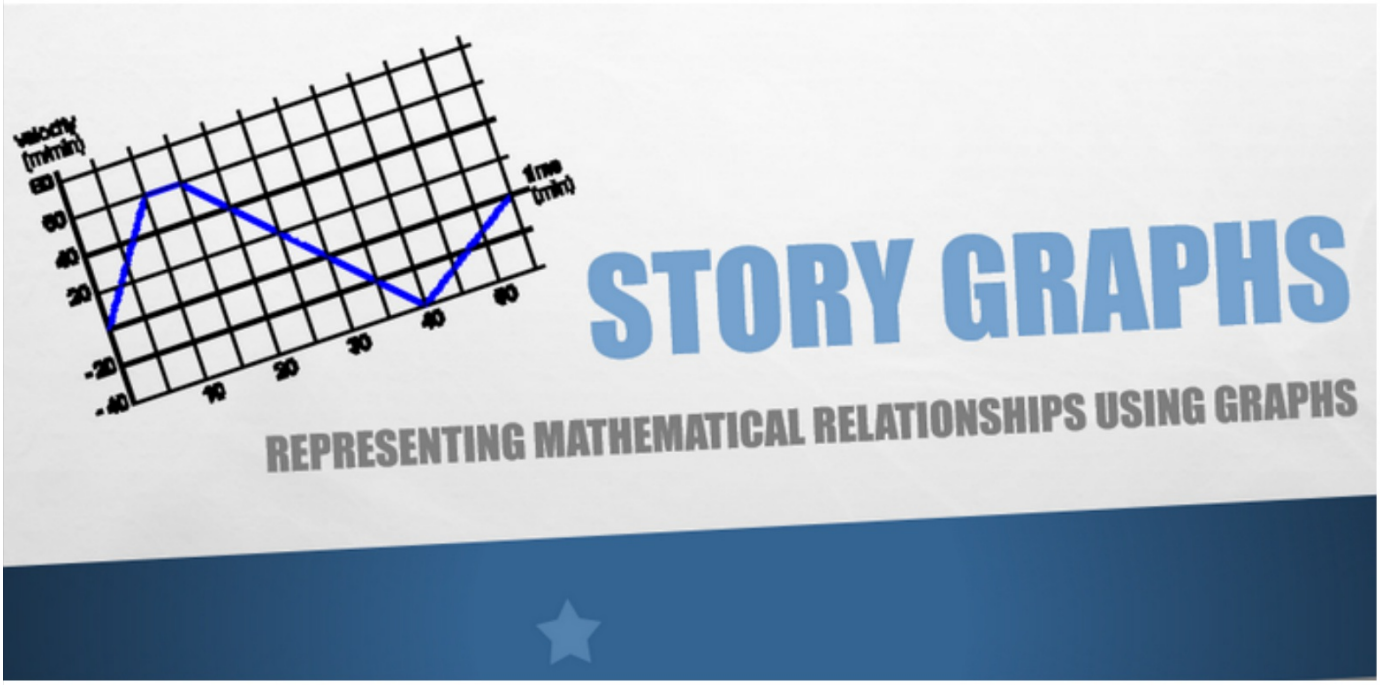
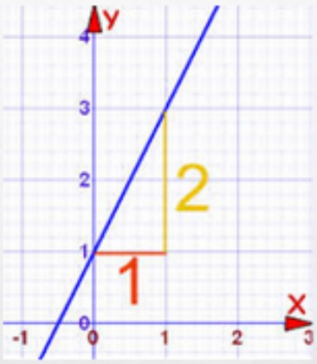
Homework Check

Comparing Functions Multiple Choice #2

Car Problem #2


velocity (mi/min)
time (min)
80
60
40
20
-20
-40
10
20
30
40
60
STORY GRAPHS
REPRESENTING MATHEMATICAL RELATIONSHIPS USING GRAPHS

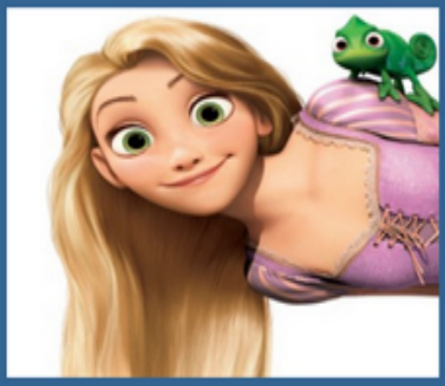
Look carefully at the graph below. What is its "story"?

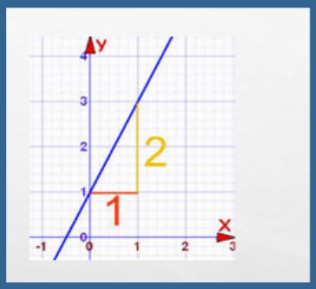


You can use graphs to visually represent the relationship between two variable quantities as they both change.

Today we are going to look at story graphs that may not be linear. We have just said that graphs are a visual representation between two variable quantities. In the graph on the previous slide, what are the variables?

Let's think of some real life scenarios that relate two quantities. With your partner, try and come up with at least three.



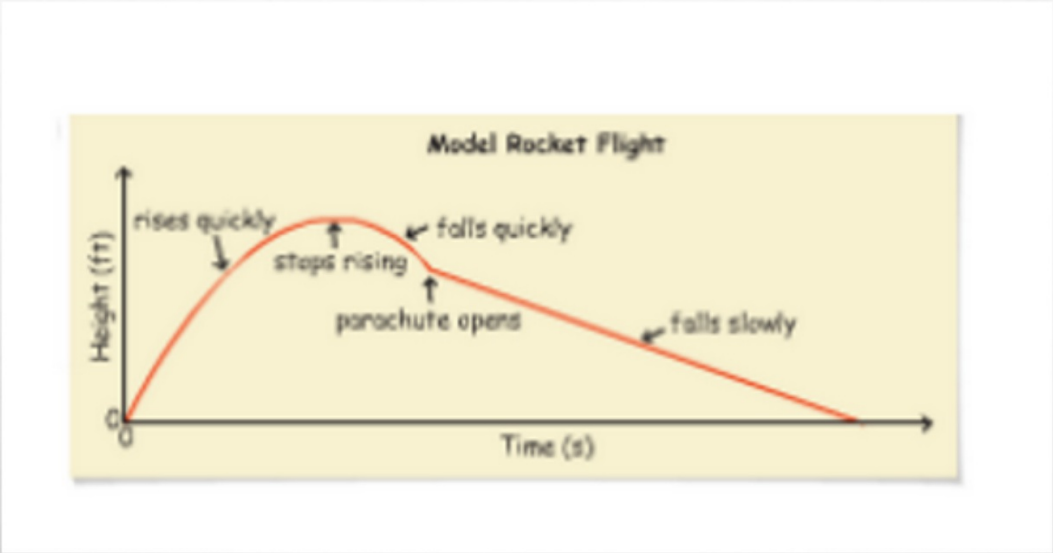


Let's look at an example of a story graph.

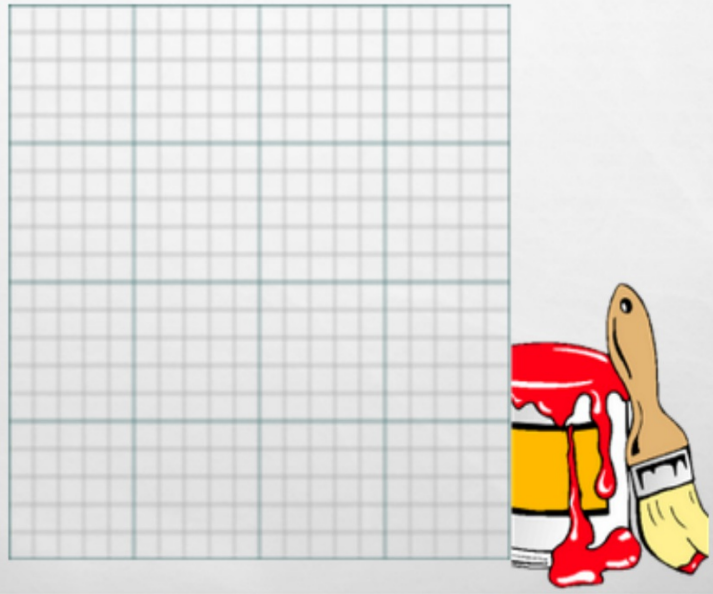
A model rocket rises quickly and then slows to a stop as its fuel burns out. It begins to fall quickly until the parachute opens, after which it falls slowly back to Earth.

What are some key words that could help you draw this scenario?
What are the two variables that will need to be represented?

Let's see what this should look like if we were to represent it graphically.



Let's try another one. Sketch a graph to represent the amount of paint in a can after an area has been painted.



We are now going to look at some real life situations and see if we can graph these accurately.

You will be given a sheet of paper to graph your story. Think carefully about the variables you will be using.

http://graphingstories.com/

http://tinyurl.com/SCMSfunctionspractice
Slide #54