Solve the equation below. Show all your work

$$-(1-x) = -6x + 27$$

Which train travels the fastest? Explain your thinking.

Train A travels 10 miles in 15 minutes

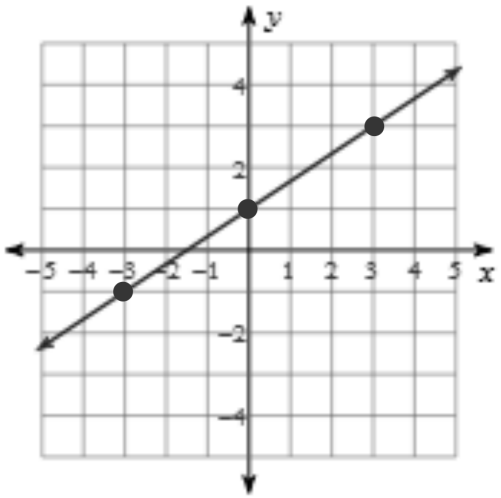
The table below describes how Train B travels.

Time (min)	4	8	12
Distance (miles)	3	6	9

Solve the equation below. Show all your work

$$-14 + r = -8(4r - 6) + 4$$

Write the equation for the graph below



The budget for the Skate King assumes a linear relationship between the number of visitors and daily operating cost. Some sample (*Visitors, operating cost)* values are given in the table below.

a.

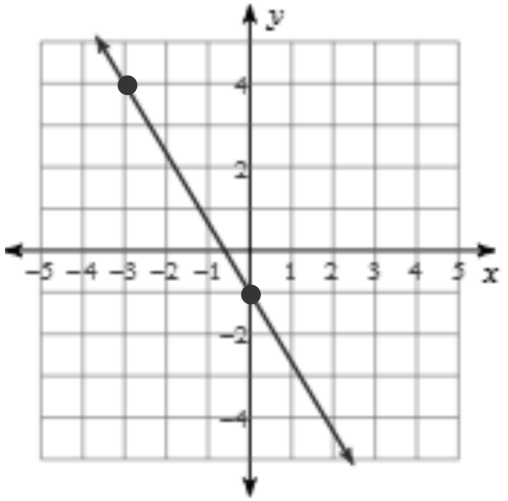
Number of Students	15	30	45	
Daily Operating Cost	$160	$220	$280	

b. Use the completed table to write an equation showing how operating cost *C* depends on number of visitors *v*.

c. What is the starting value (operating cost)?

d. What is the slope and what does it mean in the context of this problem?

Write the equation for the graph below



Solve the equation below. Show all your work

$$40 + 5a = -7 - 6(6a - 1)$$

You pull out the plug from the bathtub. After 40 seconds, there are 13 gallons of water left in the tub. One minute after you pull the plug, there are 10 gallons left. Assume that the number of gallons varies linearly with the time since the plug was pulled.

a. Write the equation expressing the number of gallons (g) left in the tub in terms of the number of seconds (s) since you pulled the plug.

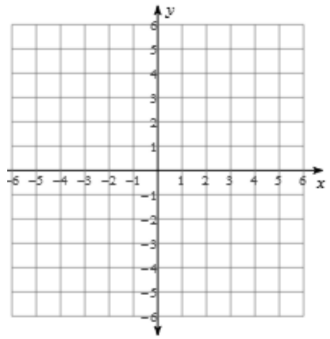
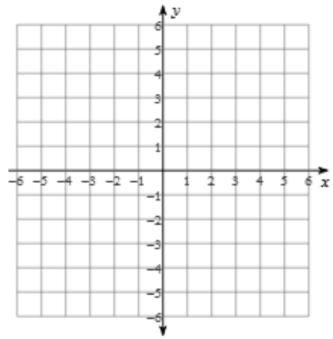
b. How many gallons would be left after 20 seconds?

Solve the equation below. Show all your work

$$5(1+6n) = 5-6n$$

Graph the equations below:

$y = 3x - 4$



$y = -\frac{7}{4}x + 5$