What's Going On?

Checking In

Minds on LGL

Action! 6 Problems

Consolidation Review!

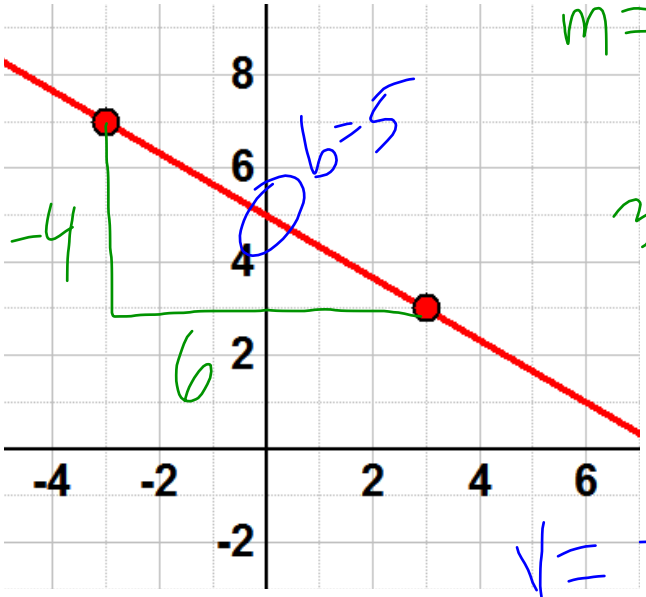
Minds on

L.G.L.

Given the graph,

a. Determine the equation of the line. $y=mx+b$

b. Create a table of values for the line including at least 5 points.



$m=\frac{-4}{6}=\frac{-2}{3}$

$b=5$

$y=\frac{-2}{3}x+5$

$y=\frac{-2}{3}\frac{(6)}{1}+5$

$y=\frac{-12}{3}+5$

$=-4+5$

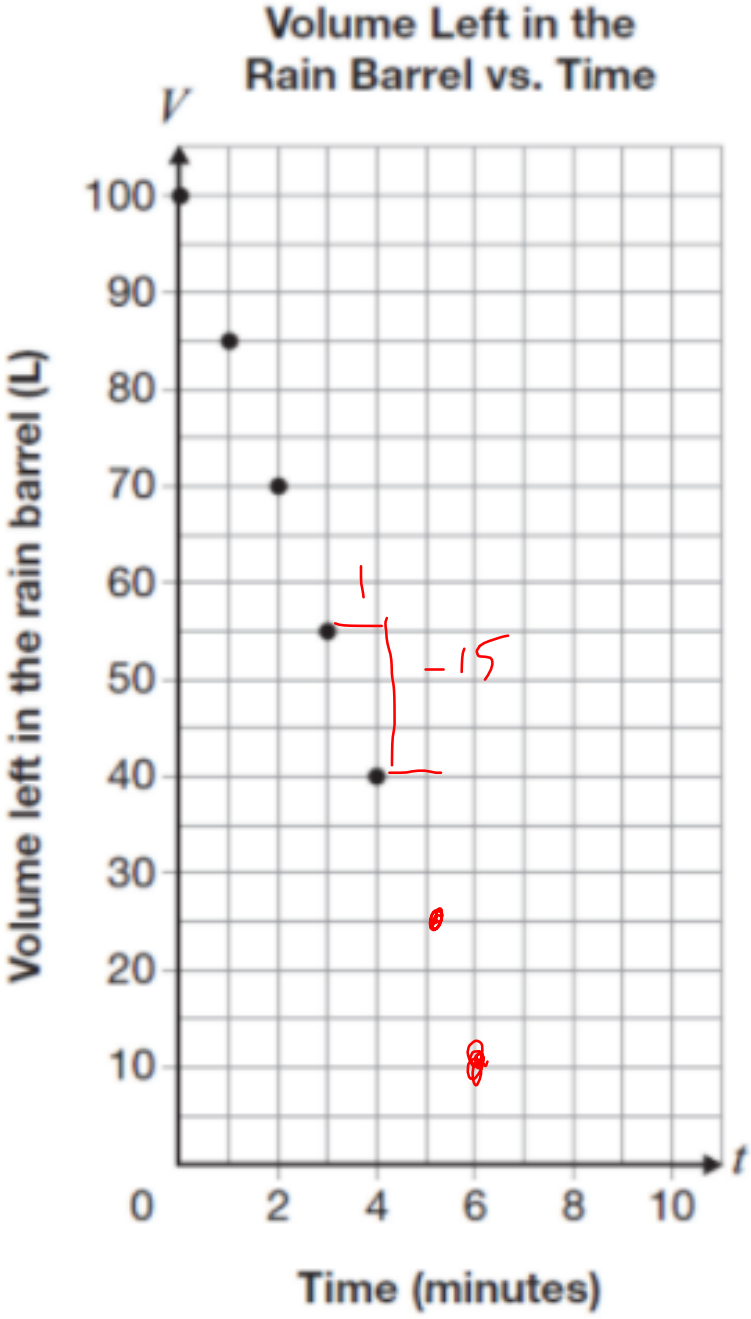
$=1$

x	y
0	5
3	3
6	1
9	-1
12	-3

Action!

6 Problems

A rain barrel full of water is drained at a constant rate. Data for the first few minutes of draining is shown on the grid below.



After 6 minutes, the draining is stopped.

How much water is needed to refill the rain barrel?

40L

There is a linear relationship between the total cost of renting a costume and the number of hours the costume is rented.

- For 3 hours, the total cost is $60.
- For 5 hours, the total cost is $80.

What type of variation is this relationship, and what is its initial value?

Partial

$\frac{20}{2} = \$10/h$

Initial = $30

Abigail buys a prepaid card for her cellphone. When she talks on her phone, a fee per minute is deducted from the value of the prepaid card.

The table below shows information about the remaining value of the card.

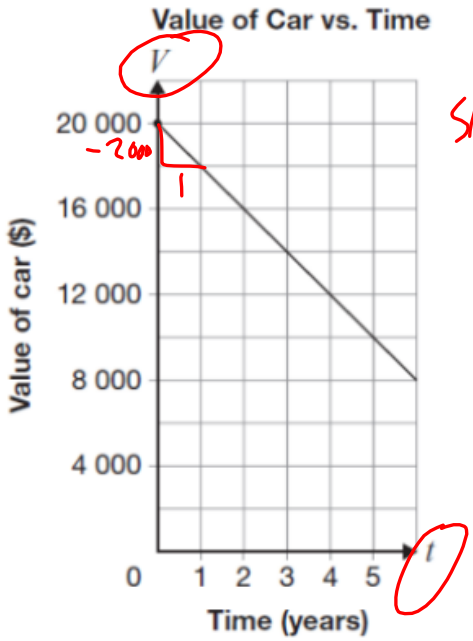
Total number of minutes used, t	Remaining value, V ($)
10	22.00
20	19.00

Determine an equation to represent the relationship between the remaining value and the number minutes used.

$$V = \frac{-3}{10}t + 25$$

$$V = -0.30t + 25$$

Cybelle and Peter each buy a car. The graph below represents the value of Cybelle's car over time.

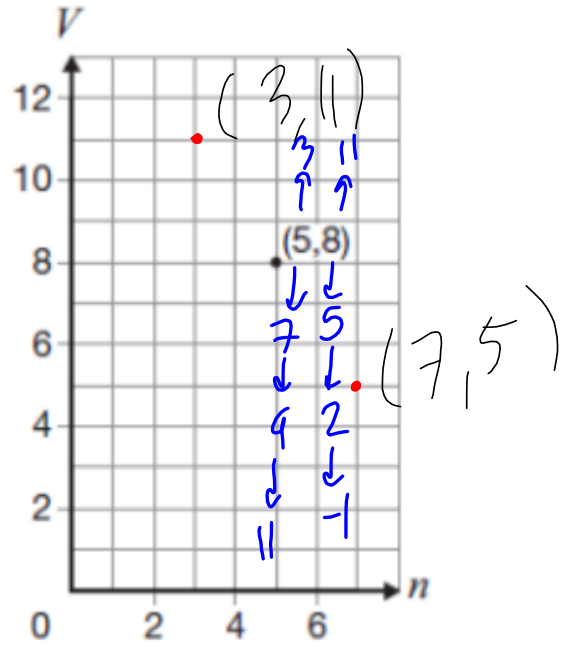


Peter's car costs less than Cybelle's. The value of both cars changes at the same rate.

Determine a possible equation to represent the relationship between the value of Peter's car, V, in dollars, and time, t, in years.

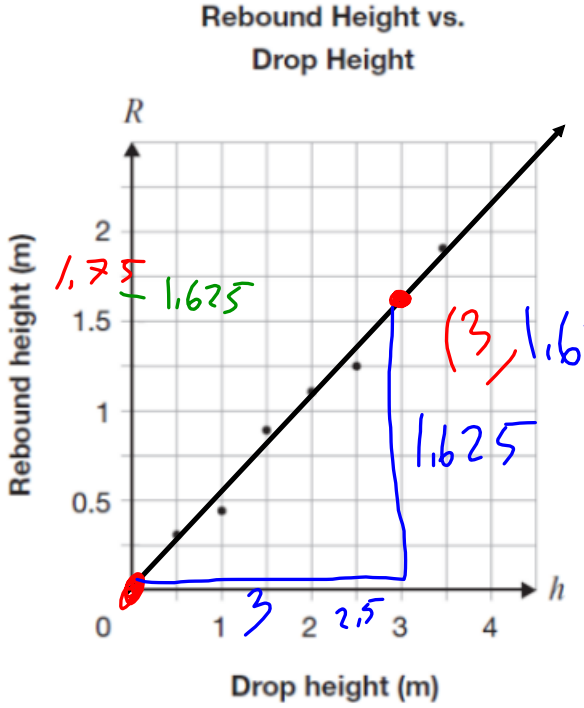
$V = -2000t + 16{,}000$

The point on the grid below belongs to a linear relation that has $-\frac{3}{2}$ as its rate of change.



Find 3 more points that also belong to this relation.

This scatter plot shows the relationship between the rebound height of a ball and the height from which the ball is dropped.



0.54

Draw a line of best fit for the data on the grid above.

Determine an equation for your line of best fit.

$R = 0.54h$ ~~+0~~

0.56

Consolidation

Review!