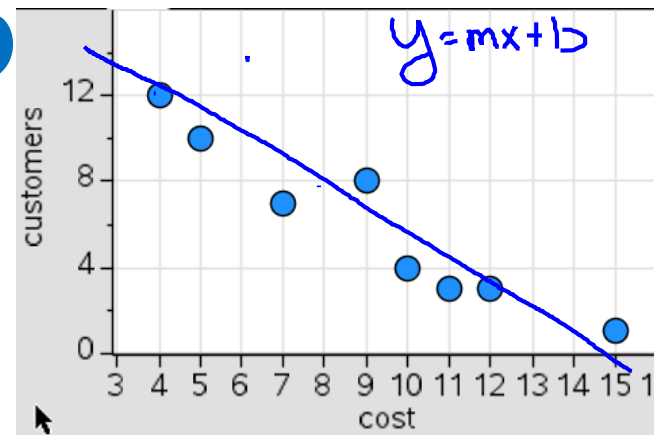


Monday, March 11, 2019



- Warm-up

- A local business, Bear Cup Coffee, was examining their prices. After talking to customers, they graphed the following graph of number of customers vs. price.

Estimate the equation for the line of best fit:

- They also examined their expenses of \$0.10 per cup for the cup, lid, etc. and \$0.90 per cup for ingredients.
- They also have operating expenses of \$300 per day.
- **Create an equation** to estimate the amount they should charge for their coffee.



cups * (-expense * cups + $mx + b$ linear profit) - operating expenses

- Work on PBL

Objectives:

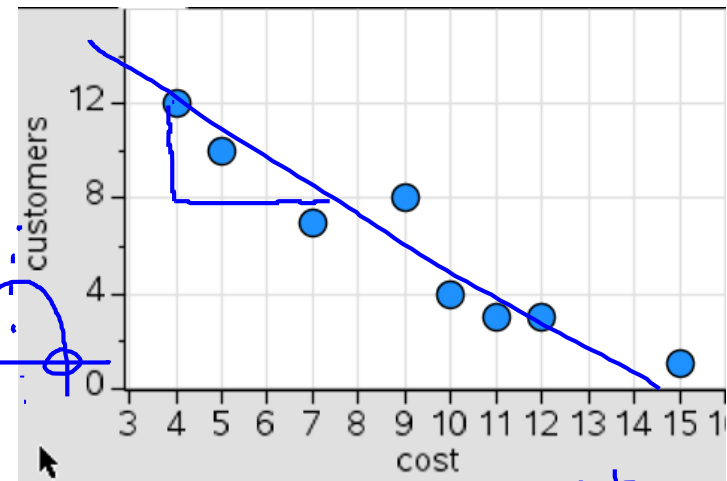
Content: I will apply my knowledge of **quadratics** to work towards solutions for my PBL.

Social: I will work well with my group and communicate my findings and ideas.

Language: I will clearly write what I accomplished today and my hopes for the next time I work on the PBL.

Warm-up

$$C(-2c + 14) - 300$$
$$-2c^2 + 14c - 300$$



- A local business, Bear Cup Coffee, was examining their prices. After talking to customers, they graphed the following graph of number of customers vs. price. Estimate the equation for the line of best fit:

$$\text{Customers (cup)} = 14 - \text{cost}$$

$$y = mx + b$$

- They also examined their expenses of \$0.10 per cup for the cup, lid, etc. and \$0.90 per cup for ingredients. $\$1.00$ expenses per cup
- They also have operating expenses of \$300 per day.
- Create an equation to estimate the amount they should charge for their coffee. $\text{Cost} = C(-1c + 14 - 1c) - 300$
cups * (-expense * cup + linear profit) - operating expenses

Objectives:

Content: I will apply my knowledge of **quadratics** to work towards solutions for my PBL.

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PBL Time – Tasks If you are the...

- **Advertising Specialist** – start to plan the flyer that you will be giving out including what needs to be on it and how to make it look
- **Economist** – before the end of the period settle on the monthly operating expenses AND the per person expenses
- **Market Analyst** – use the data that I will give you to create the linear estimate of how much people would be willing to pay for a monthly membership
- **Social Impact Specialist** – gather data from other similar companies to estimate what people might be willing to pay

Some of you may want to work with others who have the same role from the other groups

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