

Amtrak Train

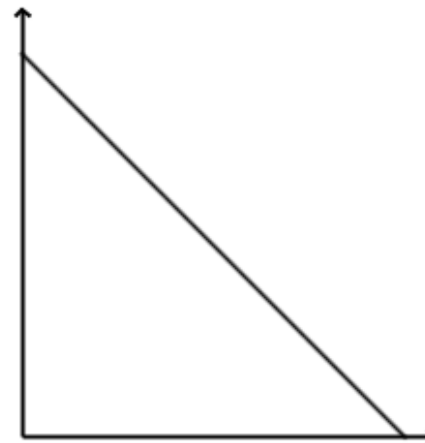
Amtrak Train

An Amtrak train leaves Washington and travels directly from Washington to Atlanta.

x = the distance, in miles, on the route the Amtrak is from Washington.

y = the distance, in miles, on the route the Amtrak is from Atlanta.

How far apart are Washington and Atlanta?



$$y = 638 - x$$

Use the equation to answer the question from the situation.

638 miles



My Thoughts!

Painting a Building

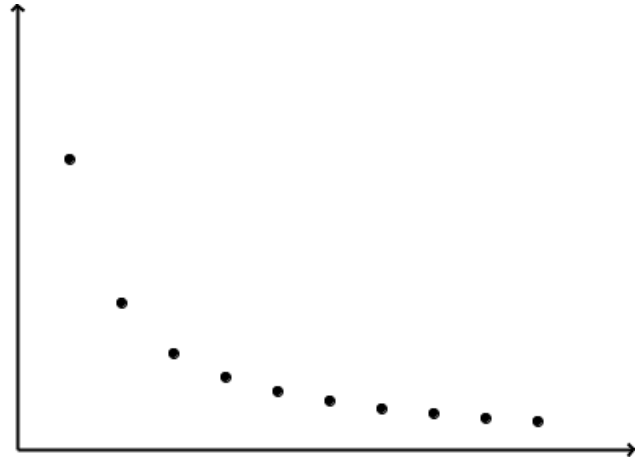
Painting a Building

A group of painters are painting a building.

x = The number of painters.

y = The length of time, in months, it will take the painters to paint the building.

How long will it take 5 painters to paint the building?



$$y = \frac{10}{x}$$

Use the equation to answer the question from the situation.

2 months



My Thoughts!

Spray Tan

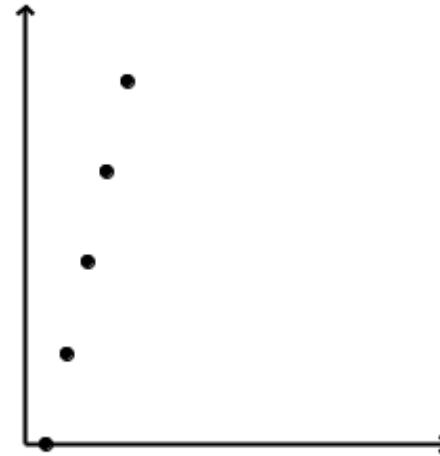
Spray Tan

You get one spray tan for free. You then pay a fixed rate for each spray after the first.

x = The number of spray tans you receive

y = The total money spent in dollars.

What is the fixed rate per spray tan?



$$y = 8(x - 1)$$

Use the equation to answer the question from the situation.

8 dollars



My Thoughts!

Computer Repair

Computer Repair

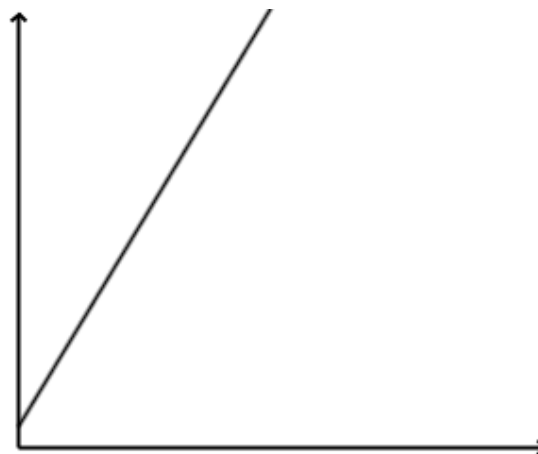
PC Squad charges a fixed fee to come to you home and repair your computer. They charge an additional hourly rate for the time they work on the computer. (The amount is prorated for portions of an hour. Also, there is a maximum charge.)

x = The time, in hours, the repairman spends working on the computer.



y = The total cost, in dollars, for the repairman's time.

How much does the PC Squad charge for a 2.5 hour job?



$$y = 15 + 50x$$

Use the equation to answer the question from the situation.

\$140



My Thoughts!

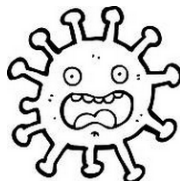
Contagious Virus

Contagious Virus

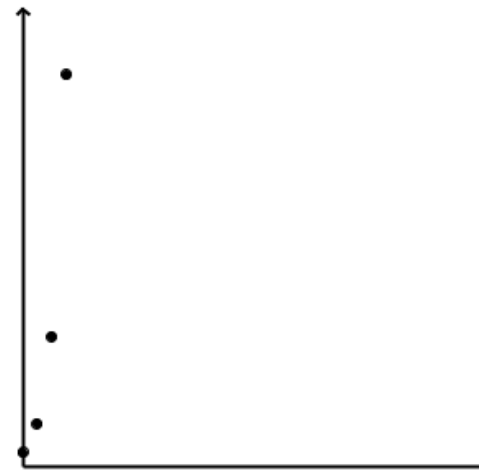
A few people come into a town and are carriers of a contagious virus. The virus spreads and every day the number of people carrying the virus triples. There is no end in sight for the virus.

x = The number of days since the carriers came into town.

y = The number of people carrying the virus.



How many people initially came into the town carrying the virus?



$$y = 10(3^x)$$

Use the equation to answer the question from the situation.

10 people



My Thoughts!

Small Group Fitness Class

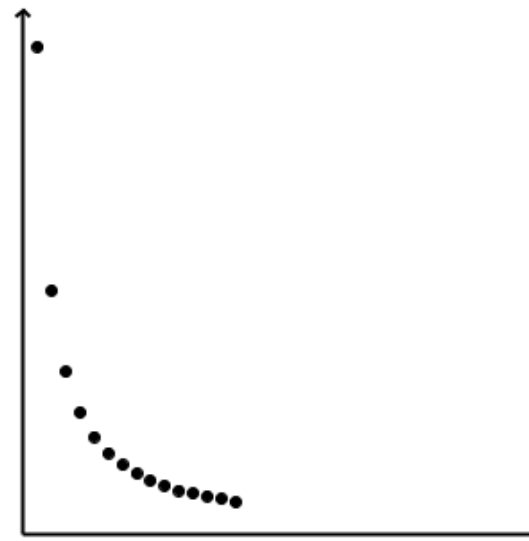
Small Group Fitness Cost

You pay a fixed amount for a 6-month membership to small group fitness classes.

x = The number of small group fitness classes that you attend.

y = The cost for each class in dollars.

How much is the cost per class if you attend 27 classes during the 6 months?



$$y = \frac{345}{x}$$

Use the equation to answer the question from the situation.

\$12.78



My Thoughts!

Folded Blanket

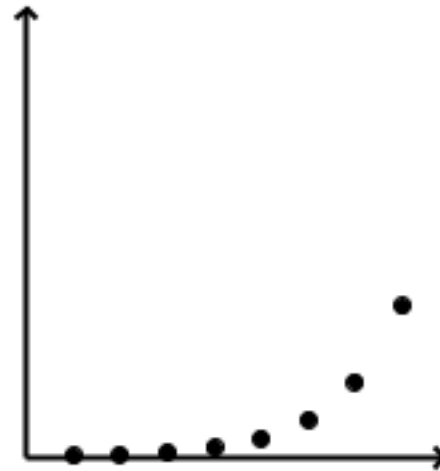
Folded Blanket

Every time you fold your large picnic blanket, the thickness doubles. You can only fold the blanket 7 times.

x = The number of folds.

y = The thickness, in inches, of the folded blanket.

How thick is the blanket after 5 folds?



$$y = \frac{1}{8}(2^x)$$

Use the equation to answer the question from the situation.

4 inches



My Thoughts!

Horseback Riding Lessons

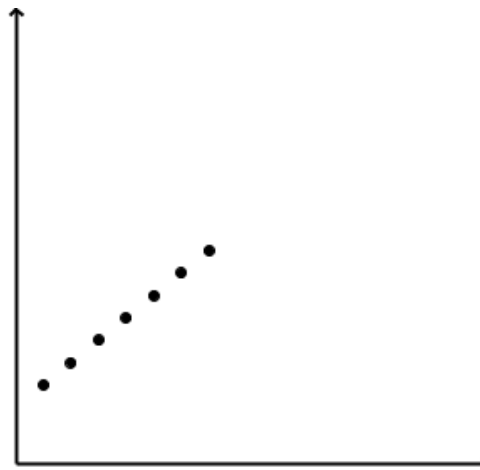
Horseback Riding Lessons

You are taking riding lessons at a local stable. There is a registration fee plus a charge per lesson

x = The number lessons

y = The total cost of the lessons

How much would you pay for 12 lessons?



$$y = 75 + 30x$$

Use the equation to answer the question from the situation.

\$435



My Thoughts!