

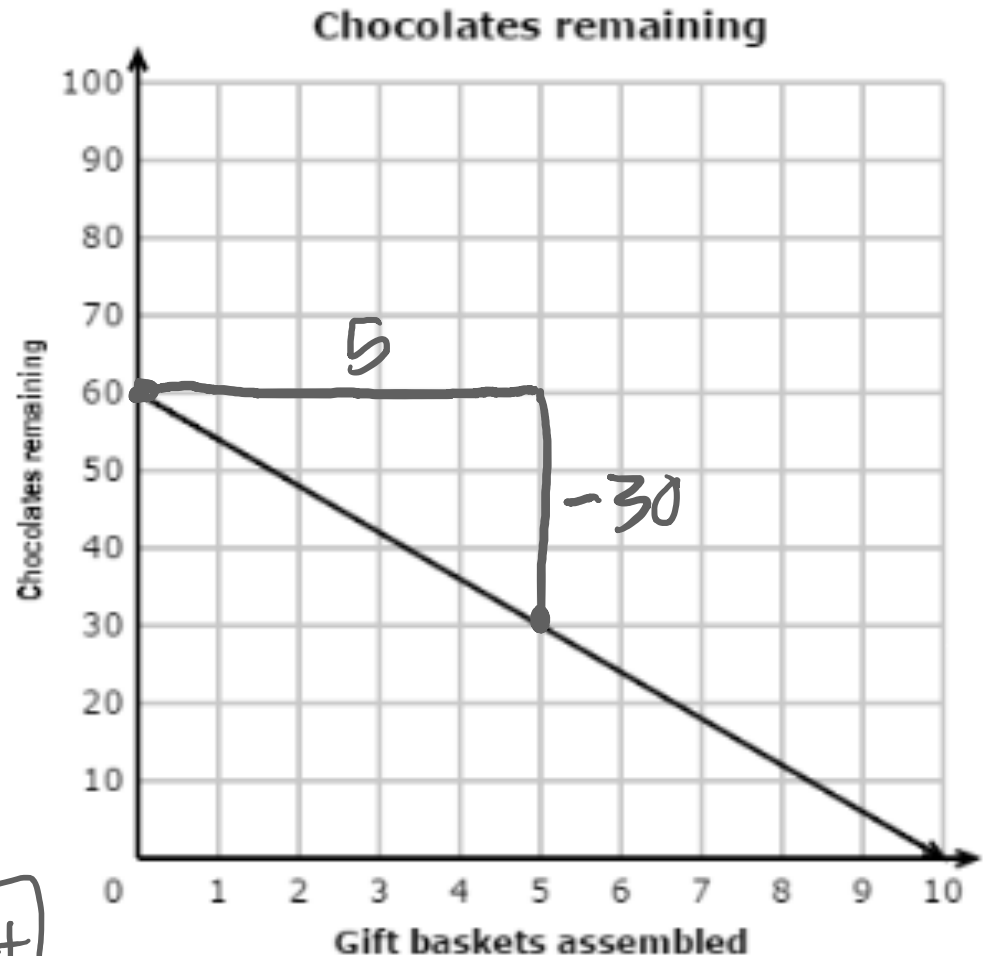
Created by Mr. Lischwe

Warmup 10/ (The 9th prime number)

1. Maria is making gift baskets. The graph shows the number of chocolates she has remaining after making gift baskets. What is the SLOPE of this graph, and what does it represent?

$$\frac{-30}{5} \rightarrow \boxed{-6}$$

6 chocolates per gift basket



When finding the slope.....

- **DO NOT JUST COUNT SQUARES.**
- **You MUST go by the numbers on the x- and y-axis!!!**

Going over the HW

Most useful representation?

1. What is the temperature after 2 days?
2. How quickly is the temperature rising?
3. When does the temperature hit 0°?
4. What is the temperature after 30 days?

Verbal Description

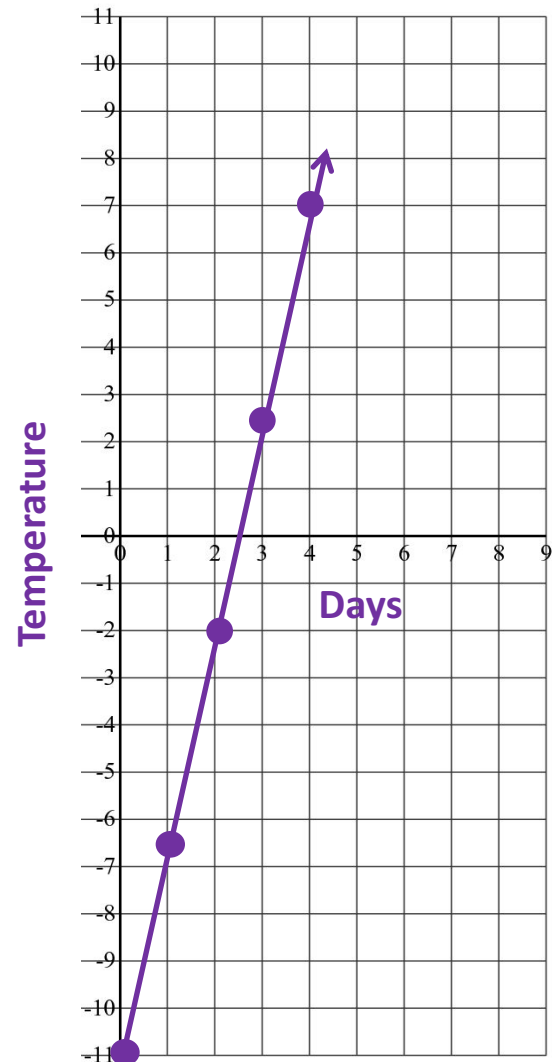
"The temperature was -11°F and rose 4.5° per day."

x (days)	y (°F)
0	-11
1	-6.5
2	-2
3	2.5
4	7

Equation

$$y = -11 + 4.5x$$

Graph



Pablo the Artist Problem

- Pablo the artist is about to start working on a masterpiece painting. The painting will be 400 square inches. After putting in a good 90-minute painting session, he only has 340 square inches left to paint.

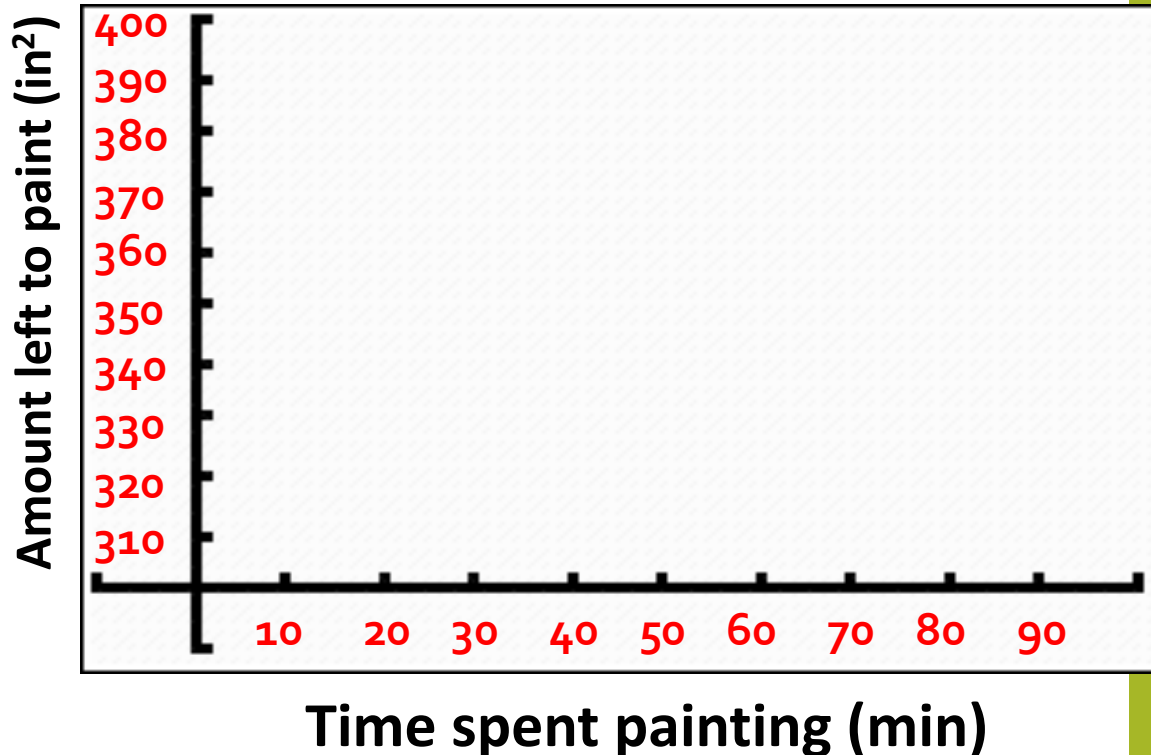
1) Graph the scenario:

2) Write an equation of the line you just drew.

$$y = -\frac{60}{90}x + 400$$



$$y = -\frac{2}{3}x + 400$$



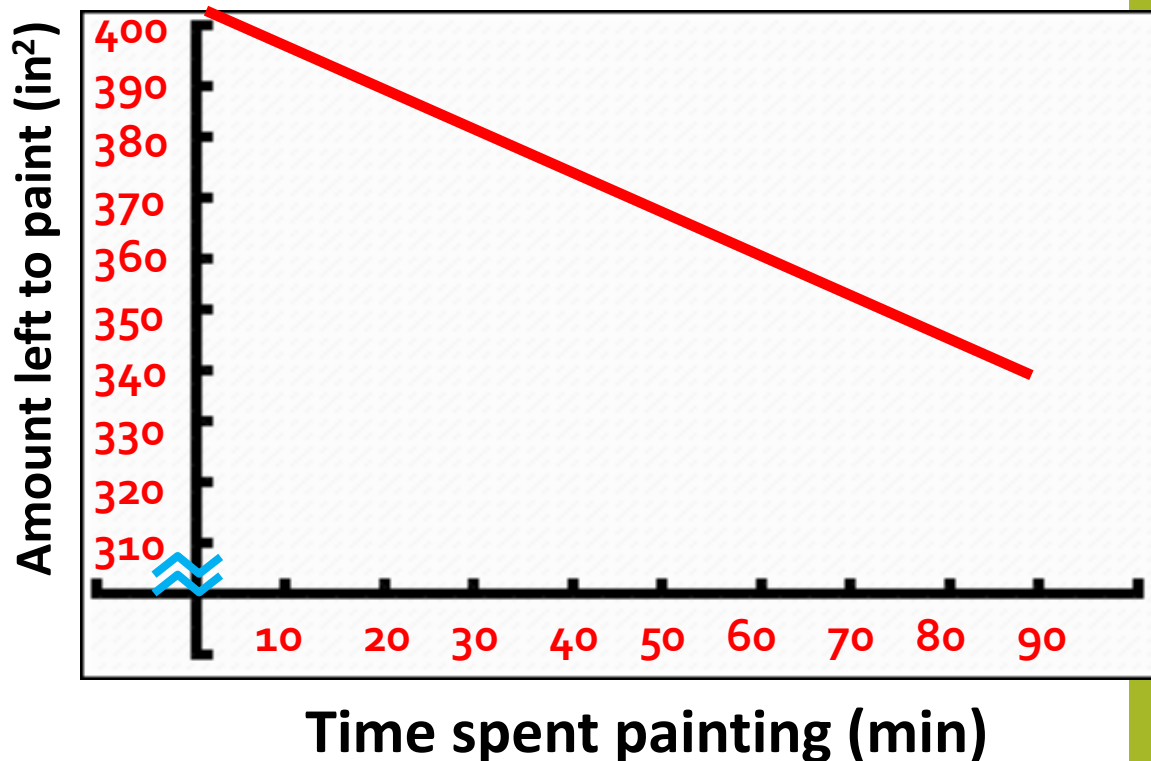
Pablo the Artist Problem

- Pablo the artist is about to start working on a masterpiece painting. The painting will be 400 square inches. After putting in a good 90-minute painting session, he only has 340 square inches left to paint.

3) Explain what the slope means in terms of the situation.

He paints 2 in^2
every 3 min.

$$-\frac{2}{3}$$



Pablo the Artist Problem

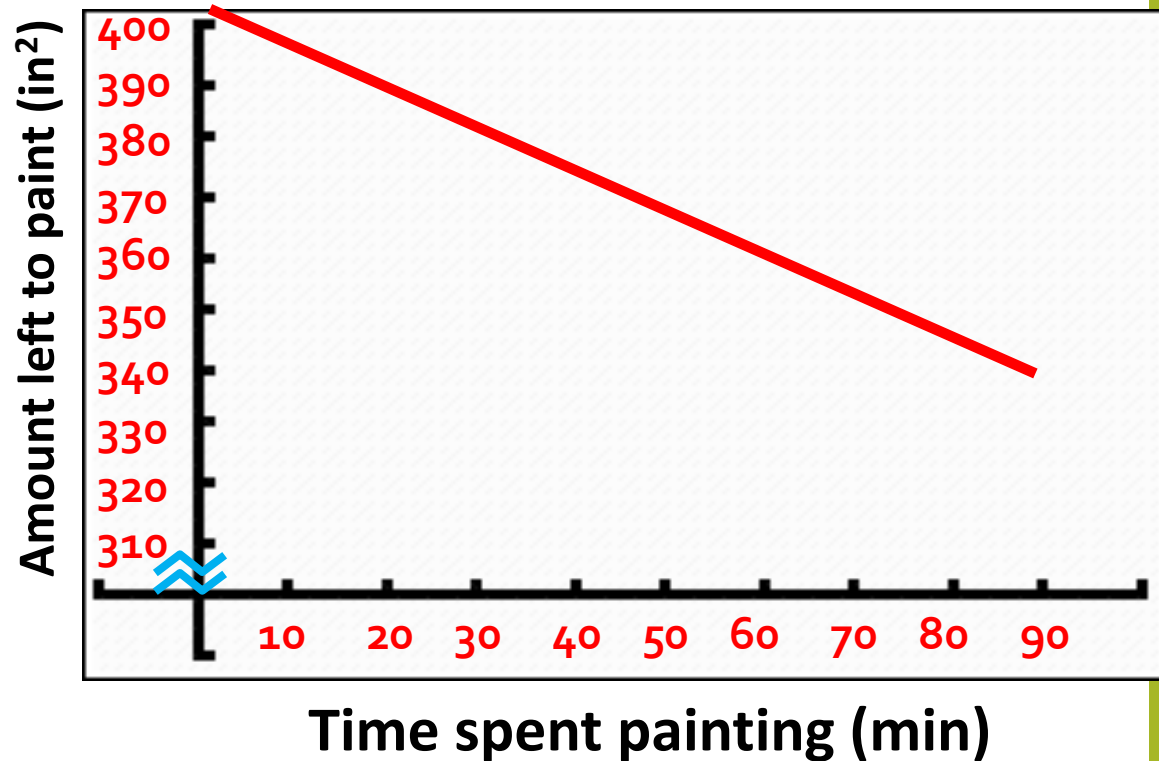
- Pablo the artist is about to start working on a masterpiece painting. The painting will be 400 square inches. After putting in a good 90-minute painting session, he only has 340 square inches left to paint.

4) If Pablo continues to paint at this pace, how long will it take him to finish his masterpiece?

$$2 \text{ in}^2 = 3 \text{ min}$$

$$\times 200 \quad \downarrow \quad \times 200$$

$$400 \text{ in}^2 = \boxed{600} \text{ min}$$



REST OF TODAY: Group Problems

- For each problem, your group will solve the problem on a giant whiteboard.
- **YOUR WORK MUST BE ORGANIZED. We should be able to clearly see your problem-solving process!!!**
- Switch writers for each problem.
- I will select some groups to share their answers.

- Jack and Jill are selling cupcakes. Jack's total profit is given by the table to the left. Jill's total profit is given by the equation to the right. Who is gaining profit at a faster rate? How do you know?

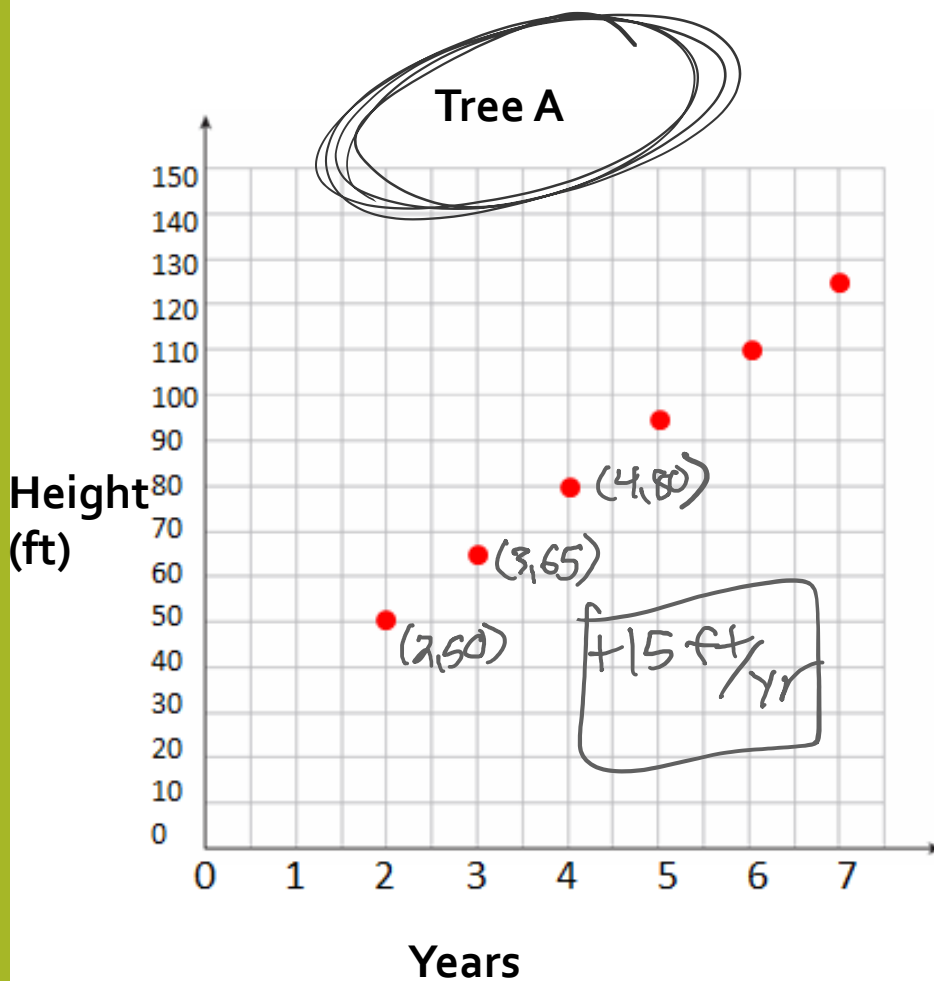
Jack (\$3 per cupcake)

Number	Cost
1	\$3.50
2	\$6.50
3	\$9.50
4	\$12.50
5	\$15.50

Jill (\$2 per cupcake)

$$y = 2x + 20$$

Which tree is growing faster?



$$\frac{18}{2} = 9 \text{ ft/yr}$$

Tree B

Years	Height (ft)
0	4
2	22
4	40
7	67
10	94

Due on **MONDAY:**

- Story Problems Worksheet!