TODAY'S AGENDA: November 3rd

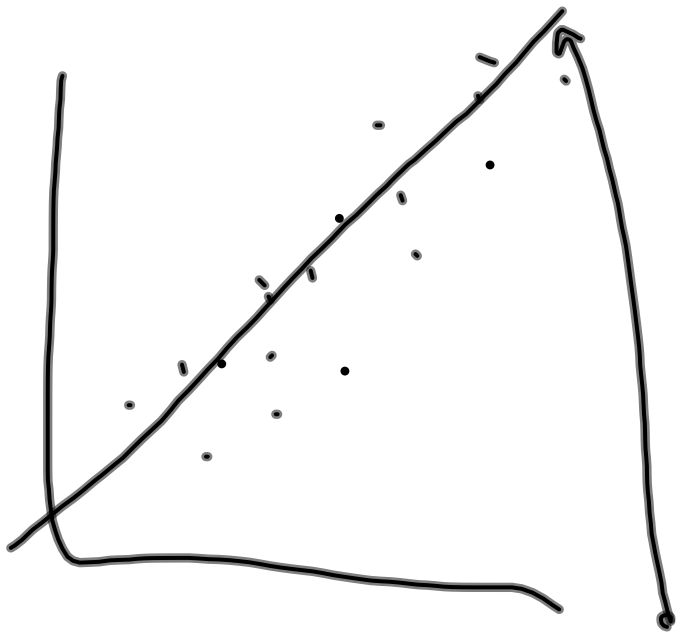
> Quarterly Exam Nov. 9 & 10

- Continue working on Khan Academy Mission

- Today's Objective:
  > Students will be able to determins the Slope of the Line of Best Fit

- Today's Standard:
  > Summarize, represent and interpret data on a single count or measurement variable.

Slope of Line of Best Fit



$y = mx + b$

slope

(x_1, y_1)

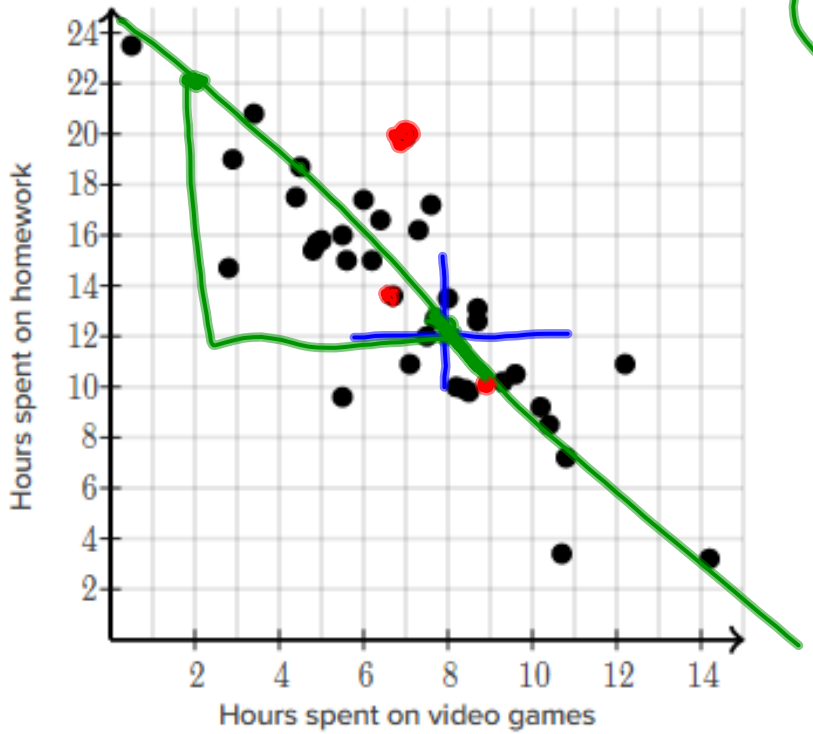
(x_2, y_2)

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

The scatter plot below shows the relationship between hours spent on video games and hours spent on homework last week for students in Ginny's class.

Which of the following is the best estimate of the average change in homework time that was associated with a 1 hour increase in time spent on video games?

- -4 hours
- $-\frac{4}{3}$ hours
- $-\frac{1}{3}$ hours
- $-\frac{1}{6}$ hours



$y = -\frac{4}{3}x + 25$

$(8, 12)$

$(9, 10)$

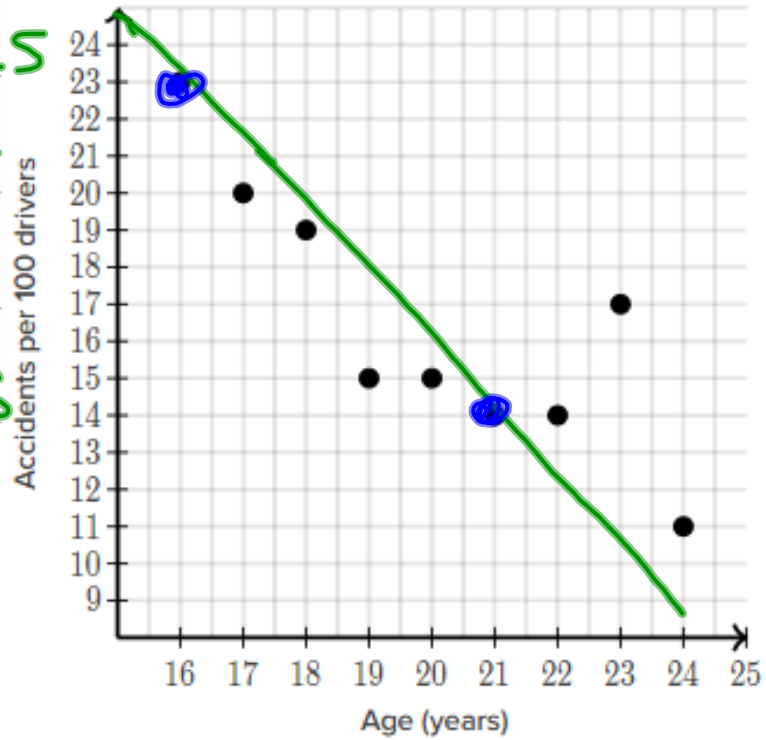
$m = -2$

$\frac{10-12}{9-8} = \frac{-2}{1}$

The plot shown below describes the relationship between the age of drivers and the number of car accidents per 100 drivers in the year 2009.

Which of the following is the best estimate of the average change in the number of accidents associated with a 1 year increase in age?

- $-\frac{1}{4}$ accident -.25
- $-\frac{1}{2}$ accident -.5
- $-\frac{3}{2}$ accident -1.5
- $-\frac{7}{2}$ accident -3.5



x_1, y_1

$(16, 23)$

$(21, 14)$

x_2, y_2

$$\frac{14-23}{21-16} = \frac{-9}{5}$$

$$-1.8$$