Agenda

Homework:

- Line Of Best Fit WS

- CN Summary

- AM

Materials:

- Calculator
- Ruler

DO NOW

1) On your DESK:

Create the equation for the line that passes between the points (3, 24) & (12, 18)

- Create the equation for the line that passes between the points
  (3, 24) & (12, 18)

Homework

- [Scatterplots WS](#)
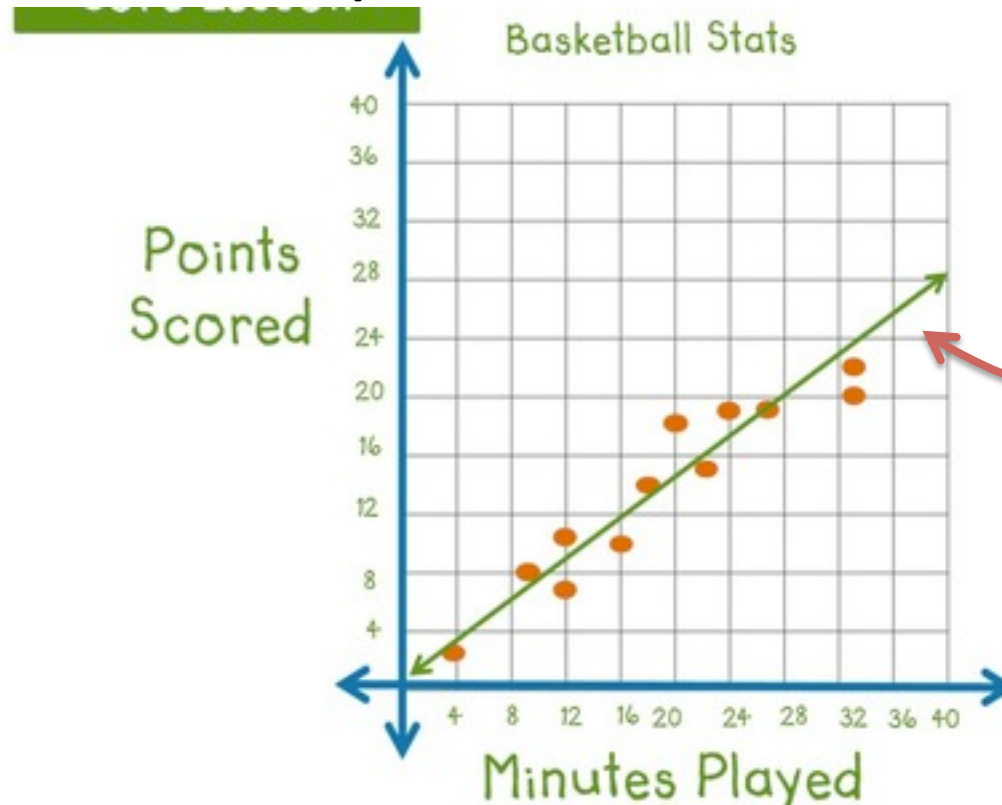
Set up Cornell Notes

- **Topic:** Scatterplots – Line of Best Fit Equation
- **EQ:** Explain how to determine the equation for the line of best fit

Update Table of Contents:

2/22/16 (Pd 1,2)	Scatterplots- Line of Best Fit Equation
1/23/16 (Pd 4)	

What is the "line of best fit"?

- A line that shows the trend of the collected data and used to predict unobserved data
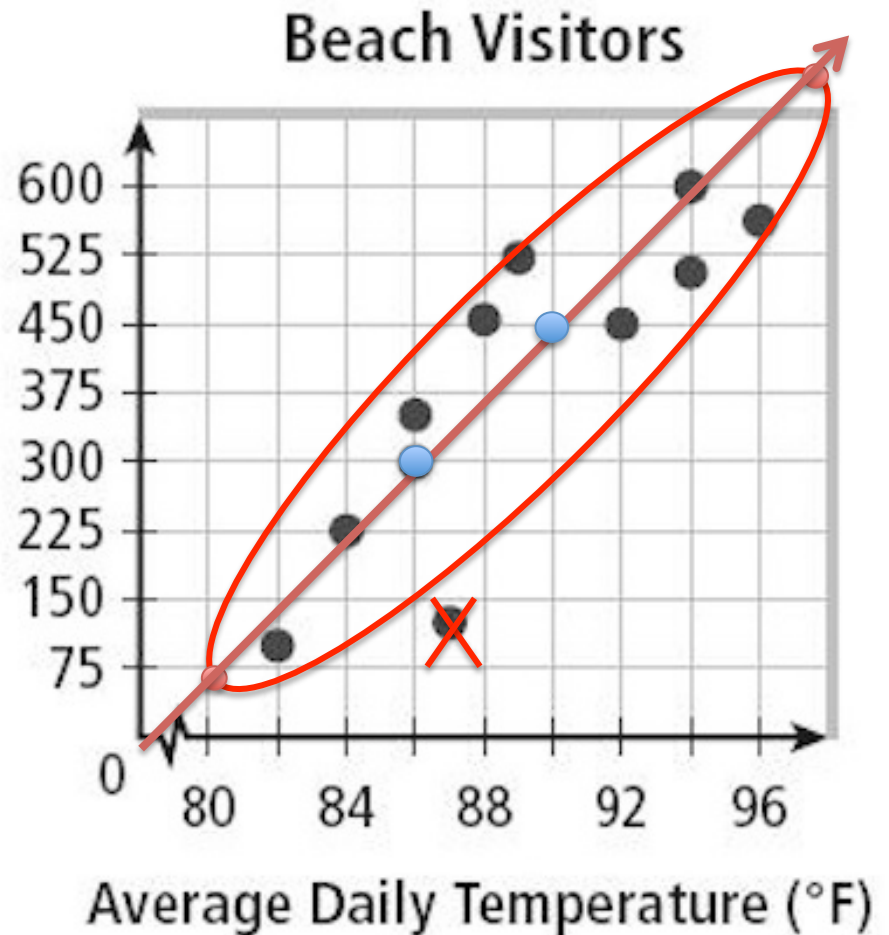
How do you determine the equation for the "line of best fit"?

1. Draw your line of best fit

2. Pick **two** points <u>ON your line</u> (Be sure you can easily find the coordinates for these points)

(86, 300) & (90, 450)

Beach Visitors

How do you determine the equation for the "line of best fit"?

4. Find the slope of the two points:
   (86, 300) & (90, 450)

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{450 - 300}{90 - 86} = \frac{150}{4} = \frac{75}{2}$$

5. Use one of the points and the slope to find b

$$300 = \frac{75}{2}(86) + b$$

$$300 = 3225 + b$$
$$-3225 \quad -3225$$
$$-2925 = b$$

6. Plug in m & b

$$f(x) = m \; x + b$$

Stationwork

- Worksheets