Name: _____ Date: _____ Period: _____

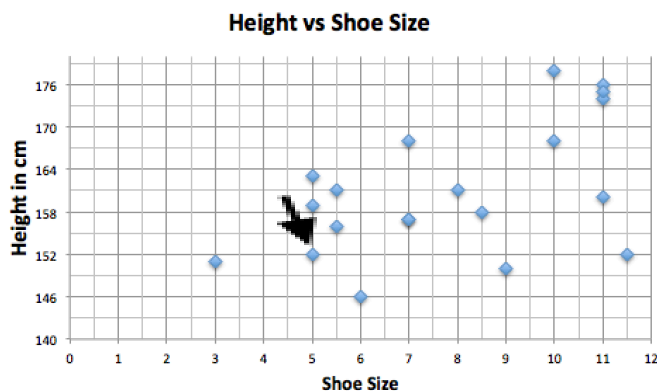# Line of Best Fit Exploration: Scatter Matters Data

**Objective:**
At the end of this lesson you should be able to properly identify where a line of best fit should go. In addition you should be able to determine if a line of best fit does NOT exist.
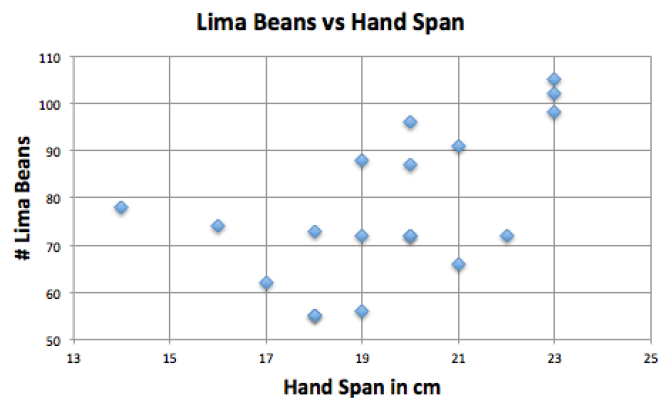
**Directions:**

1. For each graph determine if there is a positive, negative, or no correlation. Explain what the trend exhibits.
2. Draw a line of best fit through the set of points for each problem.
2. Compare your answer with your neighbor to see how close they are.
3. Complete steps two and three for each graph below.
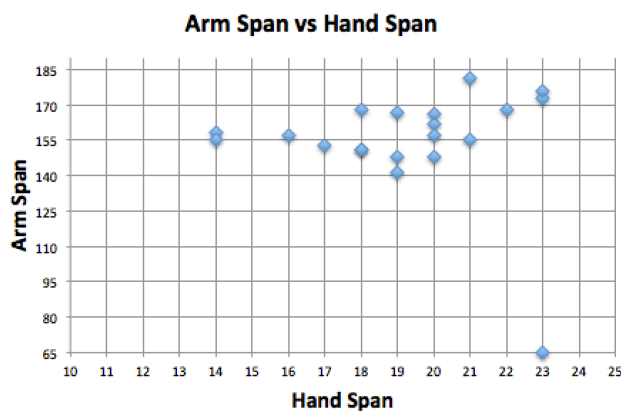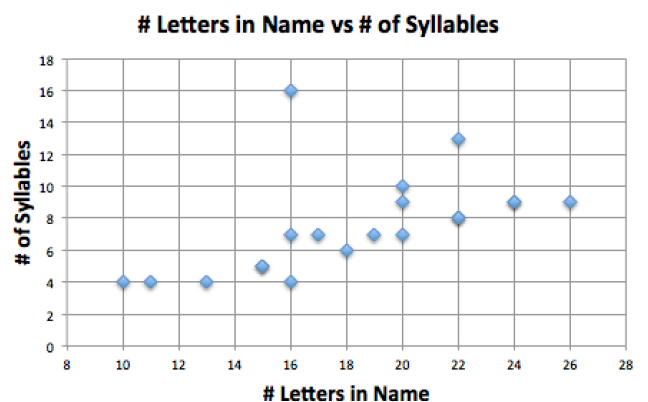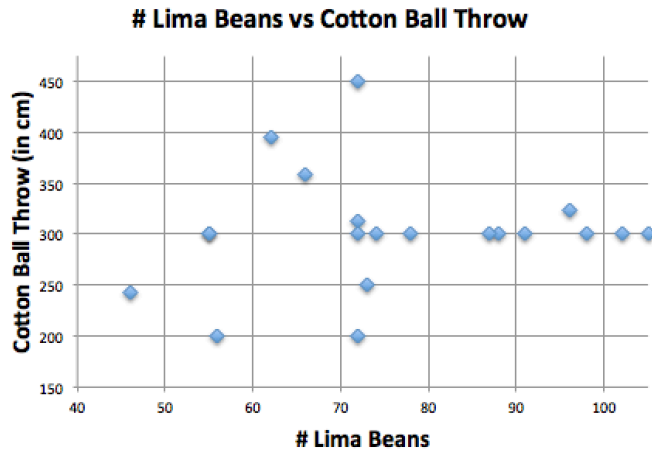4. Answer the debrief questions below.

A)

**Height vs Shoe Size**

B)

**Lima Beans vs Hand Span**

C)

**Arm Span vs Hand Span**

D)

**# Letters in Name vs # of Syllables**

E)

**# Lima Beans vs Cotton Ball Throw**



**Debrief Questions:**

1. In graph A, look at the point indicated with the arrow, what does the value for x and y represent?
2. For graph B, create a t-table for at least five of the points.
3. For graph B, predict how many lima beans you can grab if your hand span is 25 cm.
4. What do you think the line of best is for each graph?
5. What do you think the purpose is for the line of best fit?