

## Activity One Handout

Name \_\_\_\_\_

ID Number (as assigned in class) \_\_\_\_\_

Measure and record your height and arm-span (distance from the left fingertip to right fingertip).

Height: \_\_\_\_\_ cm      Arm-span: \_\_\_\_\_ cm

Record your measurements as an ordered pair. (      ,      )

On your calculator, move your point to the location that corresponds to your measurements.

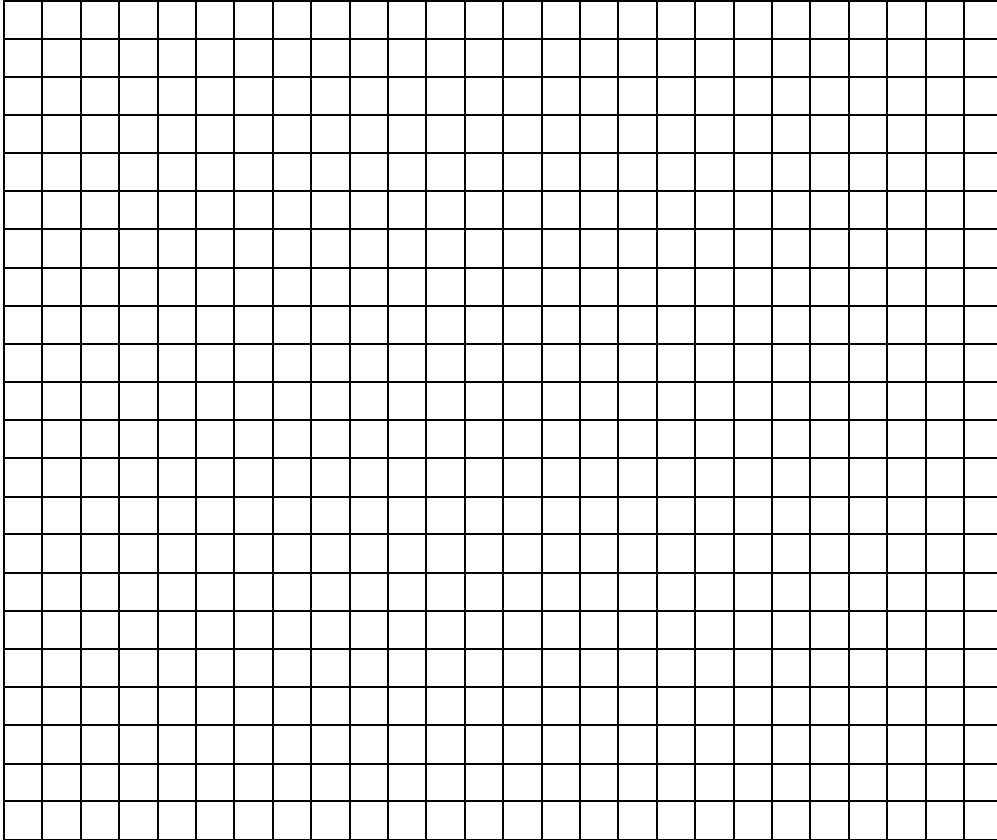
Write a function that you think best fits the class data:

Y = \_\_\_\_\_

What does your function suggest about the relationship between height and arm-span?

Sketch a graph of your function on the grid below.

Then sketch a function that you think is not as effective a fit as yours. Be sure to record the equation for this second line. Explain why it is not as good as yours.



What makes the other lines a better and worse fit, respectively, than yours?

Make a prediction about the arm-span of Shaquille O'Neal (213 cm tall). Make a prediction about the teacher's height, given her or his arm-span.

## Activity Two Handout

Name: \_\_\_\_\_

What does the line do in this activity?

Exploration 1:

What was the goal or question?

What did you all do to get to this goal?

Exploration 2:

What was the goal or question?

What did you all do to get to this goal?

Exploration 3:

What was the goal or question?

What did you all do to get to this goal?

Exploration 4:

What was the goal or question?

What did you all do to get to this goal?

How do you think the Regression Line is being drawn? What properties does it seem to have?

What do you think  $R^2$  measures? Why might it be a good measure of "fit"?