



6. Predict the hand span of a person who is 6 feet 5 inches tall.

7. Predict how tall a person is whose hand span is 6 inches.

## Part Two.

You should complete #2 and vocabulary notes before moving on

8. Describe in as much detail as you can how well your line of best fit relates to the data in the scatterplot. Are most or a lot of the points on or close to your line?

A **Residual** is a measure of how far a prediction is from what is actually observed

$$\text{Residual} = \text{actual} - \text{predicted}$$

9. How can you indicate a residual distance on your scatterplot. Show the actual residuals on your scatterplot.

10. What is the difference between a positive and negative residual in the context of this problem

## Part Three.

11. What is the largest positive residual and largest negative residual?

12. Draw a dashed line that goes through your maximum residual point and is parallel to the line of your model. Do the same thing for the minimum residual. These are your **upper** and **lower bounds**

Sample data for you to use

	Hand span (in)	Height (in)
1	6.692913	64.0
2	8.267717	67.0
3	7.992126	65.0
4	10.23622	72.0
5	9.448819	71.0
6	8.661417	70.0
7	8.267717	66.0
8	7.480315	62.0
9	7.874016	73.0
10	7.480315	65.0
11	7.007874	68.0
12	8.070866	62.0
13	8.267717	70.0
14	8.976378	73.5
15	8.897638	67.0
16	8.267717	72.0
17	9.055118	74.0
18	8.503937	70.0
19	8.267717	72.0

20	11.02362	70.0
21	7.086614	64.0
22	7.480315	68.0
23	7.677165	64.0
24	7.480315	64.0