

In stats, when we write the equation of a line, we use meaningful variable names.

For example:

$$\widehat{\text{Weight}} = -149 + 4.4 \text{ Height}$$

This tells us that someone's weight can be modeled as a function of their height. If we know their height we can estimate their weight. Weight is the response variable and height is the explanatory variable.

Example (Graph on next page):

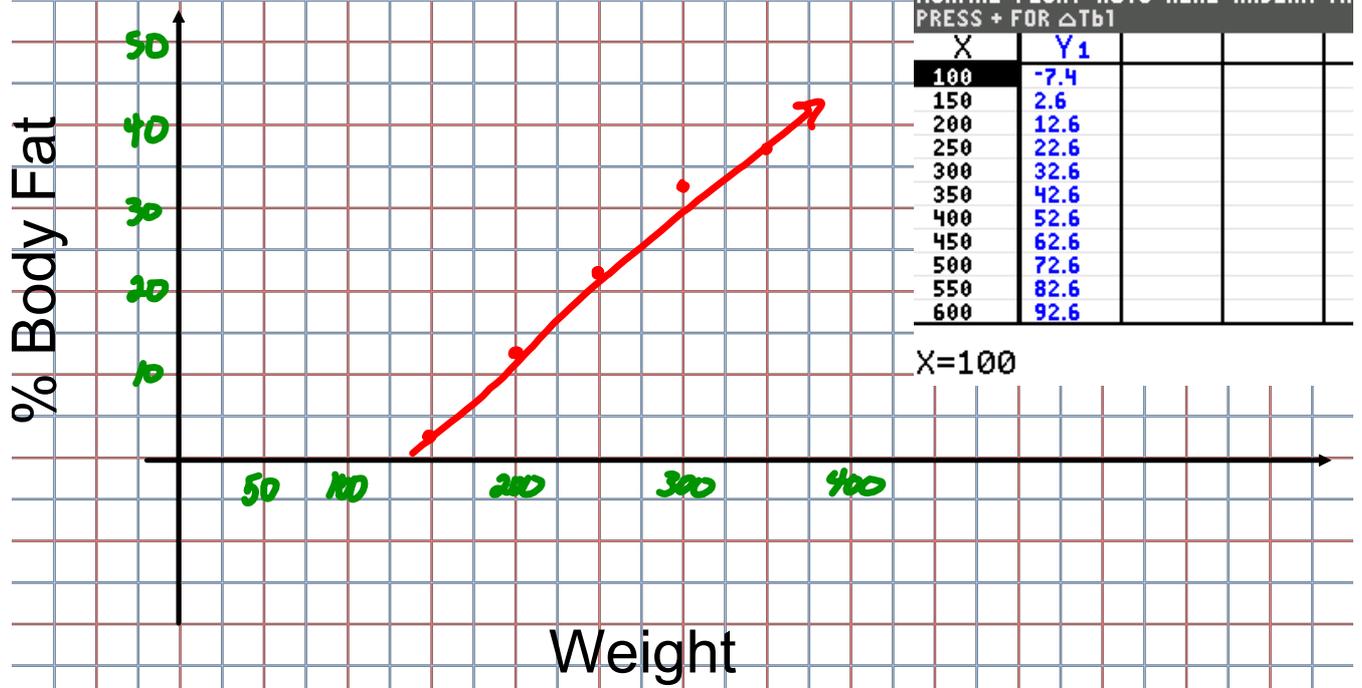
$$\widehat{\%BodyFat} = -27.4 + 0.2Weight$$

$$\text{slope} = \underline{0.2}$$

$$\text{y-int} = \underline{-27.4}$$

Use slope and y-intercept to graph or put the equation into the calculator and get points from the table. Make sure you choose appropriate, realistic values. For example, it doesn't make sense to graph from 0 - 10 on the x-axis when we are talking about people's weights.

$$\widehat{\%BodyFat} = -27.4 + 0.2Weight$$



Homework:

Slopes and Intercepts Worksheet