

Review Question 2

Psychology 310

Suppose I compute a linear regression for predicting *Weight* from *Height* in a large group of people. I get a slope b and a y -intercept c via the usual formulas. Then my thesis advisor (who has some strange prejudices about measurement) tells me to change the heights from inches to centimeters by multiplying them by 2.54, but to leave the weights (in pounds) unchanged.

What effect will this have on the slope b and y -intercept c of the regression line?

- a. b will be multiplied by 2.54, c will be divided by 2.54
- b. b will be divided by 2.54, c will increase by 2.54
- c. Neither b nor c will change
- d. b will be divided by 2.54, c will remain unchanged
- e. b and c will be multiplied by 2.54