

Practice for Quiz 3

(The quiz will be on Thursday, October 12.)
Math 125 *Kovitz* Fall 2023

A group of men in a survey produced the following data:

average height = 70 inches, SD = 3 inches
average height = 180 pounds, SD = 45 pounds, $r = 0.4$

- (a) A man picked at random from the above group was 75 inches tall. Predict his weight.
- (A) 153.05 pounds (B) 198 pounds (C) 210 pounds (D) 255 pounds
(E) 270 pounds
- (b) Find the root-mean-square error of the regression line for predicting weight from height.
- (A) 18 pounds (B) 24 pounds (C) 37.8 pounds (D) 41.243 pounds (E) 45 pounds
- (c) Find the regression equation for predicting weight from height.
- (A) $\text{wt} = 0.08 \times \text{ht} + 174.4$ (B) $\text{wt} = 0.26667 \times \text{ht} + 161.3331$
(C) $\text{wt} = \text{ht} + 110$ (D) $\text{wt} = 6 \times \text{ht} - 240$ (E) $\text{wt} = 15 \times \text{ht} - 870$