



1. What is the r value for the straight line that best describes your data for height versus stride length?
2. Do you think that the straight line fits the data well?
3. What is the equation that describes the relationship between height and stride length?
4. Using your equation in question 3, predict the stride length of a person who is not a student in your class (for example, your teacher, your principal, or a student in a different class) based on his or her height. Then measure the person's actual stride length. How close was your prediction to the actual stride length? (Remember, x is height and y is stride length.)
Prediction _____ Actual length _____ Difference _____
5. Give one possible reason that a prediction from your equation could be incorrect.
6. Solve for x in the equation found in Question 3.
7. Using the equation in question 6, predict the heights of people with the following stride lengths. (Remember, x is height and y is stride length.)
 - a) 75.5 cm _____
 - b) 45.5 cm _____
 - c) 50.0 cm _____
8. The stride lengths in the kitchen were between 64 and 65 cm long. Using your equation, which of the mountain bikers most likely left the muddy footprints on the floor? Explain. (Hint: Remember to convert the biker's heights to centimeters.)