

## Worksheet: Correlation

1. Two lists of data  $x_1, \ldots, x_n$  and  $y_1, \ldots, y_n$  have the following properties.

$$\begin{aligned} \text{mean}_x &= 10 & \text{sd}_x &= 2 \\ \text{mean}_y &= 3 & \text{sd}_y &= 4 & r &= 0.5 \end{aligned}$$

a) Find the equation for the regression line and make a sketch.

b) Predict the y value if x = 8. If x = 14?



Math 207 Introduction to Statistics

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