

3.2

A	40	40	60	60	50 (Mean)	11.54700538 (Standard Deviation)
B	48	48	50	50	49	1.154700538

$$x \rightarrow \{3, 8, 4, 6, 14\}$$

$$x - 1 \rightarrow \{2, 7, 3, 9, 13\}$$

$$x^2 \rightarrow \{9, 64, 16, 36, 196\}$$

$$n_x = 5$$

$$\Sigma x = 3 + 8 + 4 + 6 + 14 = 35$$

$$\Sigma(x - 1) = 30, \Sigma(x^2) = 321$$

$$\text{mean} = \bar{x} = \frac{\Sigma x}{n_x} = \frac{35}{5} = 7$$

Standard deviation:

$$S_x = \sqrt{\frac{\Sigma[(x - \bar{x})^2]}{n_x - 1}}$$

$$x \rightarrow \{3, 8, 4, 6, 14\}$$

$$x - \bar{x} \rightarrow \{-4, 1, -3, -1, 7\}$$

$$(x - \bar{x})^2 \rightarrow \{16, 1, 9, 1, 49\}$$

$$\Sigma[(x - \bar{x})^2] = 76$$

$$\sqrt{\frac{76}{5-1}} = \sqrt{19} \approx 4.3589$$

Variance

$$S_x^2 \text{ (just don't square root the std. dev.)} = \frac{\Sigma x^2 - \frac{(\Sigma x)^2}{n_x}}{n_x - 1} [\Sigma(x^2)]$$

Homework:

3.35a

3.41b

Go to some page with a lot of blank space and two problems. Asks for mean and std. dev. and last two things are the answers(?)