

Warmup 1-11-13

John is doing a survey over how many years couples in the United States between the ages of 20-65 years have been married. He chose a random sample of 10 pieces of data from the 1000 he had in total. These are his data:

{25, 13, 10, 15, 17, 22, 39, 29, 20, 5} (show all of your work)

$$\bar{x} = 19.5 \text{ yrs}$$

➤ Find the standard deviation of the amount of years people are staying married.

$\sigma = 9.36$ $9.86 = 5$ (place final answer here)

X	$(x - \bar{x})$	$(x - \bar{x})^2$
25	5.5	30.25
13	-6.5	42.25
10	-9.5	90.25
15	-4.5	20.25
17	-2.5	6.25
22	2.5	6.25
39	19.5	380.25
29	9.5	90.25
20	0.5	0.25
5	-14.5	210.25

$$\sum (x - \bar{x})^2 = 876.50$$

$$\frac{876.50}{9} = 97.39$$

$$\sqrt{97.39} = 9.87$$