

Q8. (10 points) A random sample was taken from a population. Each individual was measured, and those measurements are shown below.

62 48 55 24 51 60

(a) Determine the sample mean.

$$\bar{X} = \frac{62+48+55+24+51+60}{6}$$
$$= \boxed{50}$$

(b) Determine the sample standard deviation.

x_i	$(x_i - 50)^2$
62	144
48	4
55	25
24	676
51	1
60	100

$$\sum (x_i - 50)^2 = 950$$

$$\sqrt{\frac{950}{6-1}} \approx \boxed{13.78}$$