Score (*X*)	*Mean* ($\bar{X}$)	*Deviation* ($X - \bar{X}$)	*Deviation Squared* $(X - \bar{X})^2$
10	7	$10 - 7 = 3$	$(3)^2 = 9$
6	7	$6 - 7 = -1$	$(-1)^2 = 1$
4	7	$4 - 7 = -3$	$(-3)^2 = 9$
8	7	$8 - 7 = 1$	$(1)^2 = 1$
		$\Sigma = 0$	$\Sigma = 20$

We have now calculated all the information needed for the top part of the SD equation.

$$\text{SD} = \sqrt{\Sigma \frac{(X - \bar{X})^2}{N - 1}} = \sqrt{\frac{20}{N - 1}}$$

Now we are going to focus on the bottom part of the equation, known as the denominator. Recall that we already discovered the value of N when calculating the mean. We determined that four scores were reported; thus $N = 4$. Remember, we have to subtract 1 from N. Also note that we did this before square rooting our answer.

$$\text{SD} = \sqrt{\frac{20}{4 - 1}} =$$

Next we want to divide the numerator by the denominator.

$$\sqrt{\frac{20}{3}} = \sqrt{\boxed{6.67}}$$

Now take the square root.

$$\sqrt{\cancel{7}} = 2.58\boxed{2}$$

$$\boxed{6.67}$$

Putting all our steps together, we found the SD:

$$SD = \sqrt{\frac{20}{4 - 1}} = \sqrt{\frac{20}{3}} = \sqrt{\cancel{7}} = 2.58\boxed{2}$$

$$\boxed{6.67}$$

3. **Calculate the variance.**

To calculate the variance, square the standard deviation.

$$s^2 = (2.58)^2 = 6.67$$

$$\boxed{2}$$