1. **Problem**
From a very large population, a small sample of measurements was taken.

129	149	128	136	161

Please calculate the average absolute deviation using the following formula:

$$\text{AAD} = \frac{\sum |x - \bar{x}|}{n}$$

Solution
We fill out the table column by column.

x	$x - \bar{x}$	$\lvert x - \bar{x}\rvert$
129	-11.6	11.6
149	8.40000000000001	8.4
128	-12.6	12.6
136	-4.59999999999999	4.6
161	20.4	20.4
========	========	========
$\sum x = 703$		$\sum \lvert x - \bar{x}\rvert = 57.6$
$\bar{x} = 140.6$		

We are ready for the formula.

$$s = \frac{\sum |x - \bar{x}|}{n}$$

$$= \frac{57.6}{5}$$

$$= \boxed{11.52}$$

2. **Problem**
From a very large population, a small sample of measurements was taken.

155	149	149	153

Please calculate the (Bessel corrected) sample standard deviation using the following formula:

$$s = \sqrt{\frac{\sum(x-\bar{x})^2}{n-1}}$$

Solution
We fill out the table column by column.

x	$x-\bar{x}$	$(x-\bar{x})^2$
155	3.5	12.25
149	-2.5	6.25
149	-2.5	6.25
153	1.5	2.25
========	========	========
$\sum x = 606$		$\sum(x-\bar{x})^2 = 27$
$\bar{x} = 151.5$		

We are ready for the formula.

$$s = \sqrt{\frac{\sum(x-\bar{x})^2}{n-1}}$$

$$= \sqrt{\frac{27}{4-1}}$$

$$= \sqrt{9}$$

$$= \boxed{3}$$