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

136	133	130	133	134

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	$x - \bar{x}$	$\lvert x - \bar{x}\rvert$
136	2.80000000000001	2.8
133	-0.199999999999989	0.2
130	-3.19999999999999	3.2
133	-0.199999999999989	0.2
134	0.800000000000011	0.8
========	========	========
$\sum x = 666$		$\sum \lvert x - \bar{x}\rvert = 7.2$
$\bar{x} = 133.2$		

We are ready for the formula.

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

$$= \frac{7.2}{5}$$

$$= \boxed{1.44}$$

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

54	58	54	60

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	$x-\bar{x}$	$(x-\bar{x})^2$
54	-2.5	6.25
58	1.5	2.25
54	-2.5	6.25
60	3.5	12.25
========	========	========
$\sum x = 226$		$\sum(x-\bar{x})^2 = 27$
$\bar{x} = 56.5$		

We are ready for the formula.

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

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

$$= \sqrt{9}$$

$$= \boxed{3}$$