

## 5.3B Standard Deviation - Rules

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### Adding

If we add a value onto all points in a data set:

- The mean/average will increase by that value.
- The standard deviation will NOT change.

### Subtracting

If we subtract a value from all points in a data set:

- The mean/average will decrease by that value.
- The standard deviation will NOT change.

### Multiplying

If we multiply a value by all points in a data set:

- The mean/average gets multiplied by that value.
- The standard deviation gets multiplied by that value.

### Dividing

If we divide all the points in a data set by a value:

- The mean/average gets divided by that value.
- The standard deviation gets divided by that value.