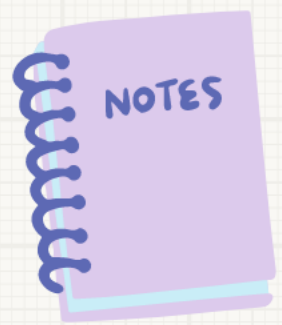


AP Bio

Math Mondays

Statistical Analysis:
Mean



Mean


$$\bar{x} = \frac{1}{n} \sum_{i=1}^n x_i$$

Math Monday #1

Mean

Treatment of tomato plants with a growth hormone yielded the following weights of tomatoes: 104 g, 82 g, 121 g, 96 g, 108 g, 73 g. What is the average weight of a tomato after treatment?

$$n = 6$$



Mean

$$\bar{x} = \frac{1}{n} \sum_{i=1}^n x_i$$

$$\bar{x} = \frac{1}{6} \sum_{i=1}^6 x_i$$

Math Monday #1

Mean

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$$n = 6$$

$$\bar{x} = \frac{1}{6} \sum_{i=1}^6 x_i$$

$$\bar{x} = \frac{1}{6} (104 + 82 + 121 + 96 + 108 + 73)$$

$$\bar{x} = \frac{1}{6} (584)$$

$$\bar{x} = 97.3$$

TI Tricks

Mean

Button: "STAT"

Select Edit → 1:Edit

Button: "ENTER"

Under L1, enter the values

Quit back to main screen by: Button "2nd" then "MODE"

Button: "STAT"

Select Calc → 1: 1-Var Stats

Button: "ENTER"

Button: "ENTER"

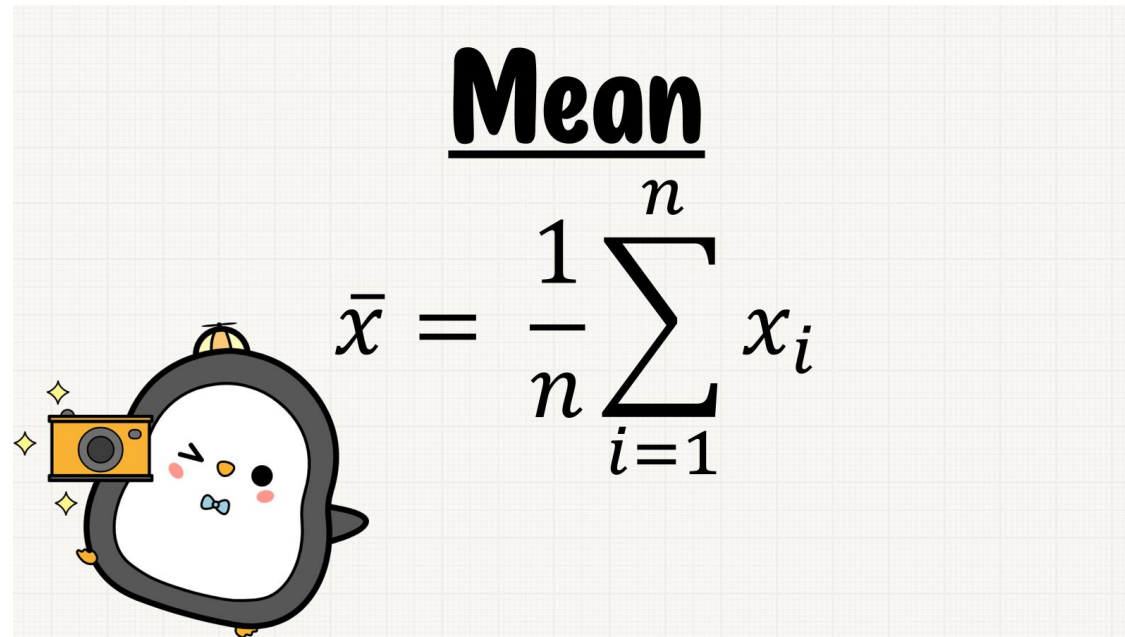
The mean is the \bar{x}

Example Problem

Mean

Initial mass of pumpkin cores was measured in grams. What is the average initial mass for the pumpkin cores? Round to the nearest hundredth.

29.15, 28.45, 30.92, 29.25, 32.09, 31.67



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Example Problem

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29.15, 28.45, 30.92, 29.25, 32.09, 31.67

$$n = 6$$

$$\bar{x} = \frac{1}{6} \sum_{i=1}^6 x_i$$

$$\bar{x} = \frac{1}{6} (29.15 + 28.45 + 30.92 + 29.25 + 32.09 + 31.67)$$

$$\bar{x} = \frac{1}{6} (181.53)$$

$$\bar{x} = 30.255 = 30.26$$