

Quiz # 2

z-score

How many standard deviation are you away from mean.

Men & women can be same standard deviation away from the mean but can have different value.

Statistics

VS

parameter

Samples

VS

population

mean

\bar{x}

$$\mu = 107.57$$

Standard deviation s

$$\sigma = 13.71$$

For a particular observation x , its z-score.

$$z = \frac{\bar{x} - \mu}{\sigma}$$

1. z-score = 0, μ is the same as mean, = 107.57.

$$2. z + 16 = 107.57 + 13.71.$$

$$3. z - 16 = 107.57 - 13.71.$$

~~4.~~

$\mu = 107$ $\sigma = 13$, which x has $z = 1$

$$z = \frac{x - \mu}{\sigma}$$

$$1 = \frac{x - 107}{13}$$

$$x = 120.$$

Homework - 4, 5, 6, 7