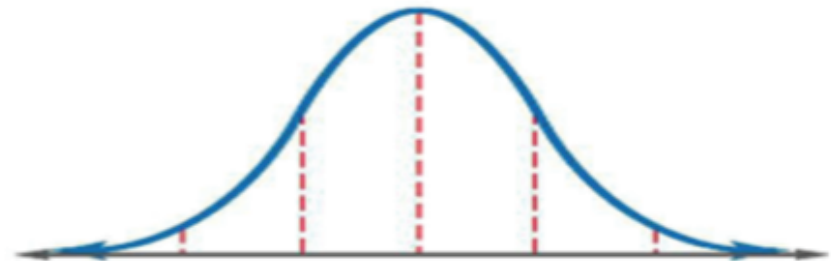


A normal distribution has a mean of 88 and a standard deviation of 12.

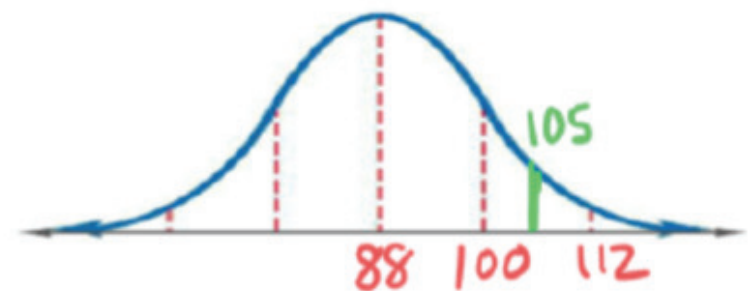
What is the z-value for a value of 105? $z = \frac{x - \mu}{\sigma}$



A normal distribution has a mean of 88 and a standard deviation of 12.

What is the z-value for a value of 105? $z = \frac{x - \mu}{\sigma}$

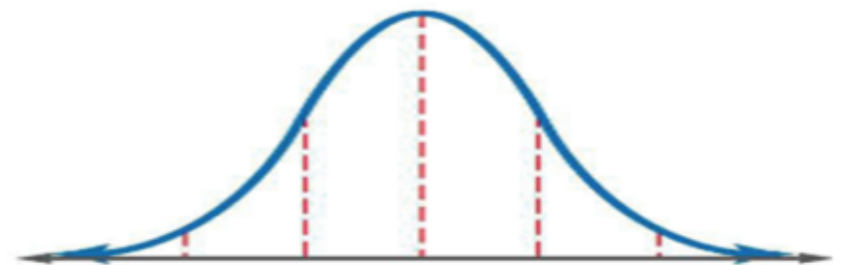
$$z = \frac{105 - 88}{12} \approx 1.4$$



A normal distribution has a mean of 32
and a standard deviation of 2.

What value has a z-score of 1.7?

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



A normal distribution has a mean of 32 and a standard deviation of 2.

What value has a z-score of 1.7?

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

$$2 \cdot 1.7 = \frac{x - 32}{2}$$

$$\begin{array}{r} 3.4 = x - 32 \\ +32 \quad \quad +32 \end{array}$$

$$\boxed{35.4 = x}$$

