

$\sigma$

$$s^2$$

*S*

$\mu$

$\bar{x}$

$$\sigma^2$$

$H_0$

$$H_1$$



$\beta$

$\alpha$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 0.38)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 0.48)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 0.58)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 0.68)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 0.78)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 0.88)$$



Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 0.98)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 1.25)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 1.28)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 1.40)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 1.50)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 1.64)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 1.65)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 1.75)$$



Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 1.96)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 2.00)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 2.10)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 2.20)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 2.25)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 2.30)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 2.35)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 2.40)$$



Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 2.45)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 2.50)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 2.58)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 1.03)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 1.13)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 1.23)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 1.33)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 1.43)$$



Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \geq 1.53)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 0.20)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 0.45)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 0.48)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 0.58)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 0.60)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 0.68)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 0.72)$$



Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 0.78)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 0.88)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 0.70)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 1.00)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 1.10)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 1.15)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 1.20)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 1.30)$$



Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 1.45)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 1.50)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 1.52)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 1.55)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 1.59)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 1.60)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 1.64)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 1.65)$$



Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 1.69)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 1.70)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 1.74)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 1.80)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 1.85)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 1.94)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 1.98)$$

Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 1.96)$$



Where  $Z \sim N(0, 1^2)$ , use the Murdoch-Barnes tables to determine the following probability:

$$P(Z \leq 1.17)$$

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 103$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 105$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 132$

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 107$

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 109$

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 111$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 112$ .



Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 113$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 115$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 117$

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 118$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 121$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 122$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 124$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 126$ .



Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 129$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 130$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 133$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 136$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 139$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 141$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 142$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 145$ .



Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 146$

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 148$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 97$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 94$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 91$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 88$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 87$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 84$ .



Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 83$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 80$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 79$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 77$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 75$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 73$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 71$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 71$ .



Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 70$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 69$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 68$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 67$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 65$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 63$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 59$ .

Suppose **X** is a normally distributed random variable with the following parameters:

- ▶ Mean:  $\mu = 100$
- ▶ Std. Deviation:  $\sigma = 20$

Compute the Z-score for  $X = 57$ .