

Answer on Question # 40972 - Math - Statistics

Assume that the mean hourly cost to operate a commercial airplane follows the normal distribution with a mean of \$2,125 per hour and a standard deviation of \$280.

What is the operating cost for the lowest 6 percent of the airplanes? (Round z value to 2 decimal places. Omit the "\$" sign in your response.)

Answer:

Z value is calculated

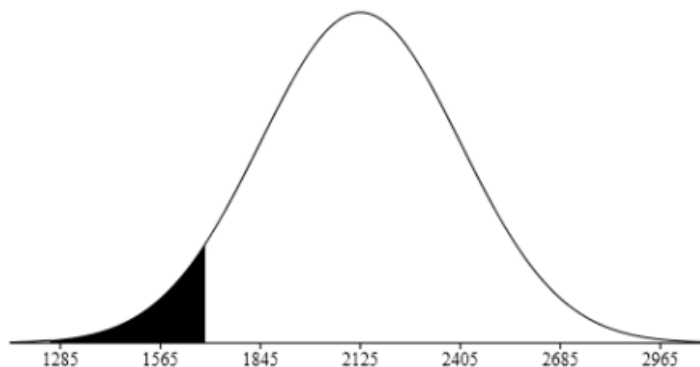
$$Z = (X - \mu) / \sigma$$

$$Z = (X - 2125) / 280$$

Z value for 6% interval is 1.5571 (table value). Thus:

$$X = 1689.57$$

Operating cost for the lowest 6 percent of the airplanes is 1689.57



- Area from a value (Use to compute p from Z)
- Value from an area (Use to compute Z for confidence intervals)

Specify Parameters:

Area

Mean

SD

Results:

Above

Below

Between

Outside

