Answer on Question #83280 – Math – Statistics and Probability

Question

Annual salaries for a large company are approximately normally distributed with a mean of 46000 dollars and a standard deviation of 6000 dollars. One manager claims that all of his direct reports are paid above the 75th percentile for the company. What is the minimum dollar figure of employees working under this manager?

Solution

$$P(Z < z) = 0.75 \ \rightarrow \ z = 0.675 \ \rightarrow \ \frac{x - 46000}{6000} = 0.675 \ \rightarrow \ x = 50050.$$

Minimum dollar figure is $50050.

Answer: $50050.