

Question #71632, Math / Statistics and Probability

If x is a normal variable with the mean $\mu=5$ and variance (sigma square)=16, what is the probability that x is less than or equal to 6?

Answer.

$$P(X < 6) = P\left(Z < \frac{X-\mu}{\sigma}\right) = P\left(Z < \frac{6-5}{\sqrt{16}}\right) = P(Z < 0.25) = 0.5987.$$

Answer provided by <https://www.AssignmentExpert.com>