

Answer on Question #48500 – Math – Statistics and Probability

Question.

If Z is a standard normal variable, find the probability $P(Z > 0.59)$.

Solution.

We shall use the tabulated function of Laplace: $\Phi(x) = \frac{1}{\sqrt{2\pi}} \int_0^x e^{-\frac{u^2}{2}} du$. The required probability is equal to $P(Z > 0.59) = 0.5 - \Phi(0.59) = 0.5 - 0.2224 = 0.2776$.

Answer. 0.2776.