

Answer on Question #71847 – Math – Statistics and Probability

Question

In a hospital 60% of the patients are married. What's the probability that a sample of one ward with 8 patients, had 3 were married

Solution

Probability of a patient being married is 0.6

$$\begin{aligned}P(3 \text{ patients being married in a ward of } 8) &= {}^8C_3 * (0.6)^3 * (0.4)^5 \\ &= 56 * 0.216 * 0.01024 \\ &= 0.1238\end{aligned}$$

Answer: 0.1238.