

Answer on Question #51599 – Math – Statistics and Probability

Question

When a die is thrown, what is the probability that the number is greater than 1, given that it is odd?

- a) $1/5$
- b) $3/5$
- c) $4/5$
- d) $2/5$

Solution

There are 6 possible results of the experiment: {1, 2, 3, 4, 5, 6}. Let X be the number. The result is a success, if we will get 3 or 5. So, using the conditional probability obtain

$$P(X > 1 | X - \text{odd}) = \frac{P(X > 1, X - \text{odd})}{P(X - \text{odd})} = \frac{2}{6} = \frac{1}{3}.$$

Answer

All of the proposed answers are not correct. The right answer is $\frac{1}{3}$.