

## Answer on Question #64734 – Math – Statistics and Probability

### Question

Let the sample space be  $S = \{1, 2, 3, 4, 5\}$ . Suppose the outcomes are equally likely. Compute the probability of the event  $E =$  "an even number less than 5".

### Solution

If the sample space is

$$S = \{1, 2, 3, 4, 5\},$$

then

$$E = \text{"an even number less than 5"} = \{2, 4\}.$$

It is given that the outcomes are equally likely.

According to the classical definition of probability, the probability of the event  $E$  is

$$P(E) = \frac{|E|}{|S|} = \frac{2}{5} = 0.4.$$

**Answer:** 0.4.