Answer on Question #81165, Math/Statistics and Probability

A number is chosen at random from the first twenty five natural numbers. Calculate the probability that the integer is divisible by 3 or 5.

The answer: The total sample is:

$$S = [1, 2, 3, 4, 5, ...21, 22, 23, 24, 25] \tag{1}$$

so 25 numbers, $n(S) = 25$.

A set of integers divisible by 3 or 5 is:

$$A = [3, 5, 6, 9, 10, 12, 15, 18, 20, 21, 24, 25] \tag{2}$$

so 12 numbers, $n(A) = 12$.

Therefore the probablity $p(A) = n(A)/n(S) = 12/25$