Answer on Question #57284 – Math – Statistic s and Probability

Question

a golf ball is selected at random from a golf bag. IF the golf bag contains 8 brown balls, 9 black balls, and 3 red balls, find the probability that the golf ball is brown or black is

Solution

Let A=”the golf ball is brown”,

B=”the golf ball is black”,

C=”the golf ball is brown or black”.

By classical definition of probability, $P(A) = \frac{8}{8+9+3}$, $P(B) = \frac{9}{8+9+3}$.

Probability of the union of mutually exclusive events is

$$P(C) = P(A \cup B) = P(A) + P(B) = \frac{8}{8+9+3} + \frac{9}{8+9+3} = \frac{8+9}{8+9+3} =$$

$$= \frac{17}{20} = 0.85$$

Answer: 0.85.