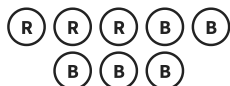


Probability of a Single Event

ANSWERS

1

A bag holds 3 red and 5 blue counters. One is taken at random. Find $P(\text{red})$.



$$P(\text{red}) = \frac{3}{8} \quad \begin{array}{l} \text{counters that are red} \\ \text{all the counters} \end{array}$$

Answer $\frac{3}{8}$

2

A bag holds 4 green and 6 yellow counters. One is taken at random. Find $P(\text{yellow})$.

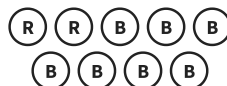


$$P(\text{yellow}) = \frac{6}{10} \quad \begin{array}{l} \text{counters that are yellow} \\ \text{all the counters} \end{array}$$

Answer $\frac{3}{5}$

3

A bag holds 2 red and 7 blue counters. One is taken at random. Find $P(\text{blue})$.



$$P(\text{blue}) = \frac{7}{9} \quad \begin{array}{l} \text{counters that are blue} \\ \text{all the counters} \end{array}$$

Answer $\frac{7}{9}$

4

A bag holds 5 green and 3 red counters. One is taken at random. Find $P(\text{green})$.



$$P(\text{green}) = \frac{5}{8} \quad \begin{array}{l} \text{counters that are green} \\ \text{all the counters} \end{array}$$

Answer $\frac{5}{8}$

5

A bag holds 2 red, 3 blue and 5 green counters. One is taken at random. Find $P(\text{blue})$.

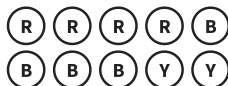


$$P(\text{blue}) = \frac{3}{10}$$

Answer $\frac{3}{10}$

6

A bag holds 4 red, 4 blue and 2 yellow counters. One is taken at random. Find $P(\text{red})$.



$$P(\text{red}) = \frac{4}{10}$$

Answer $\frac{2}{5}$

7

A fair dice is rolled. Find the probability of rolling a number greater than 4.

2 out of 6

Answer $\frac{1}{3}$

8

A bag has 3 red counters and some blue counters. The probability of picking red is $\frac{1}{4}$. How many blue counters are there?

12 counters altogether

Answer 9

Probability of a Single Event *further practice*

ANSWERS

9

A box holds 12 tiles numbered 1 to 12. One tile is taken at random. Find the probability that its number is a multiple of 3.

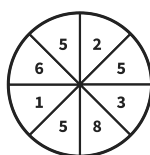


3, 6, 9, 12: $\frac{4}{12}$

Answer $\frac{1}{3}$

10

This fair spinner has 8 equal sections. Find the probability that it lands on an odd number.



5, 3, 5, 1, 5: 5 out of 8

Answer $\frac{5}{8}$

11

A box holds 20 chocolates. 7 are dark chocolate, 9 are milk chocolate and the rest are white chocolate. One chocolate is taken at random. Find the probability that it is not milk chocolate.

20 - 9 = 11, so $\frac{11}{20}$

Answer $\frac{11}{20}$

12

Each letter of the word STATISTICS is written on a card. One card is taken at random. Find the probability that it shows the letter T.

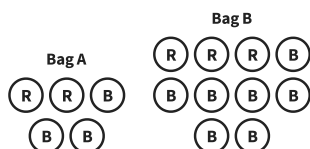


3 cards show T, out of 10

Answer $\frac{3}{10}$

13

Zak wants to take a red counter (R) from one of these bags without looking. Bag B has more red counters. Which bag gives Zak the better chance? Show how you know.



$\frac{2}{5} = \frac{4}{10}$ and $\frac{3}{10}$

Answer Bag A

14

A jar holds only green sweets and yellow sweets. There are 12 yellow sweets. The probability of taking a green sweet at random is $\frac{2}{5}$. How many green sweets are in the jar?

12 yellow is $\frac{3}{5}$, so 20 sweets

Answer 8 green sweets

15

A bag holds 4 red counters and 6 blue counters. How many red counters must be added to the bag so that the probability of taking a red counter at random is $\frac{1}{2}$?

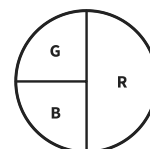


6 red and 6 blue

Answer 2 red counters

16

This spinner has three sections, red (R), blue (B) and green (G). Mo says the probability of landing on red is $\frac{1}{3}$ because there are three colours. Is Mo right? Explain.



red is half of the spinner, the sections are not equal

Answer No, it is $\frac{1}{2}$