

Probability as a fraction (2)
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Here are some events. Can you work out the probability of each event happening?

Write the probability of the following events happening as a fraction.

1. A snooker table has 4 red balls and 6 other colours on it. One ball is hit without looking at its colour.
What is the probability that it is red ball?

2. A bag has 20 raffle tickets in it, numbered from 1 to 20.
What is the probability of picking out an even number?

3. A spinner has the numbers 1 to 20 on it.
If it is spun what is the probability of getting a prime number?

4. A milkcrate has ten semi-skimmed and 4 skimmed bottles of milk.
A robin lands on one of the milk bottles.
What is the probability that it lands on a bottle of skimmed milk?

5. Twenty playing cards are pinned on a board. Four are hearts. Six are spades. Ten are diamonds.
A boy throws a dart at the board and lands on one of the cards.
What is the probability that he lands on a spade?

6. A football team is made up of six boys and five girls. One of the team scores a goal.
What is the probability of the goal scorer being a boy?

7. There are 16 tickets left in the tombola. Three are winning tickets.
What is the probability of picking a winning ticket?

8. In the last 100 days it has rained on only 12 of them.
If one day was picked at random what is the probability of it being a rainy day?

Now write your answers again, but as decimal fractions (You might need a calculator for some):

1. 2. 3. 4.

5. 6. 7. 8.

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Answers

As fractions:

1. $\frac{4}{10}$ or $\frac{2}{5}$ 2. $\frac{10}{20}$ or $\frac{1}{2}$ 3. $\frac{8}{20}$ or $\frac{2}{5}$ (1 is not a prime number) 4. $\frac{4}{14}$ or $\frac{2}{7}$
5. $\frac{6}{20}$ or $\frac{3}{10}$ 6. $\frac{6}{11}$ 7. $\frac{3}{16}$ 8. $\frac{12}{100}$ or $\frac{6}{50}$ or $\frac{3}{25}$

As decimals (to 2 decimal places):

1. 0.40 2. 0.50 3. 0.40 4. 0.29
5. 0.30 6. 0.55 7. 0.19 8. 0.12