

Outcome 3 - Choosing at Random

Bronze examples


Examples...

A bag contains a red ball, 4 green balls, a yellow ball and 5 purple balls.

A ball is chosen at random.

What is the probability of...

...picking a green ball?	$\frac{4}{11}$	$\frac{5}{11}$
...picking a purple ball?	$\frac{11}{11}$	$\frac{11}{11}$



Silver examples


Examples...

A bag contains 3 red balls, 4 green balls, 3 yellow balls and 6 purple balls.

A ball is chosen at random.

What is the probability of...

...picking a green ball?	$\frac{4}{16} = \frac{1}{4}$
...picking a purple ball?	$\frac{6}{16} = \frac{3}{8}$



Gold examples


Examples...

A bag contains 3 red balls, 4 green balls, 3 yellow balls and 6 purple balls.

A ball is chosen at random.

What is the probability of...

...NOT picking a green ball?	$\frac{12}{16} = \frac{3}{4}$
...NOT picking a purple ball?	$\frac{10}{16} = \frac{5}{8}$



Bronze Questions

A bag contains a green counter, 5 red counters, a yellow counter and 2 blue counters. A counter is chosen at random. What is the probability of choosing...

- 1 a green counter? 2 a red counter?
 3 a yellow counter? 4 a blue counter?
 5 a purple counter?

A bag contains 3 purple tokens, 5 red tokens, a blue token and 5 green tokens. A token is chosen at random. What is the probability of choosing...

- 6 a purple token? 7 a red token?
 8 a blue token? 9 a green token?
 10 a yellow token?



Silver Questions

A bag contains 4 green counters, a red counter, 3 yellow counters and 2 blue counters. A counter is chosen at random. What is the probability of choosing...

- 1 a green counter? 2 a red counter?
 3 a yellow counter? 4 a blue counter?
 5 a purple counter?

A bag contains 5 purple tokens, 4 red tokens, 6 blue tokens and 5 green tokens. A token is chosen at random. What is the probability of choosing...

- 6 a purple token? 7 a red token?
 8 a blue token? 9 a green token?
 10 a yellow token?



Gold Questions

A bag contains 4 green counters, a red counter, 3 yellow counters and 2 blue counters. A counter is chosen at random. What is the probability of **NOT** choosing...

- 1 a green counter? 2 a red counter?
 3 a yellow counter? 4 a blue counter?
 5 a purple counter?

A bag contains 5 purple tokens, 4 red tokens, 6 blue tokens and 5 green tokens. A token is chosen at random. What is the probability of **NOT** choosing...

- 6 a purple token? 7 a red token?
 8 a blue token? 9 a green token?
 10 a yellow token?



Bronze Answers

- | | | | |
|----|----------------|-----|----------------|
| 1. | $\frac{1}{9}$ | 2. | $\frac{5}{9}$ |
| 3. | $\frac{1}{9}$ | 4. | $\frac{2}{9}$ |
| 5. | 0 | 6. | $\frac{3}{14}$ |
| 7. | $\frac{5}{14}$ | 8. | $\frac{1}{14}$ |
| 9. | $\frac{5}{14}$ | 10. | 0 |

Silver Answers

- | | | | |
|----|------------------------------|-----|-------------------------------|
| 1. | $\frac{4}{10} = \frac{2}{5}$ | 2. | $\frac{1}{10}$ |
| 3. | $\frac{3}{10}$ | 4. | $\frac{2}{10} = \frac{1}{5}$ |
| 5. | 0 | 6. | $\frac{5}{20} = \frac{1}{4}$ |
| 7. | $\frac{4}{20} = \frac{1}{5}$ | 8. | $\frac{6}{20} = \frac{3}{10}$ |
| 9. | $\frac{5}{20} = \frac{1}{4}$ | 10. | 0 |

Gold Answers

- | | | | |
|----|----------------|-----|----------------|
| 1. | $\frac{3}{5}$ | 2. | $\frac{9}{10}$ |
| 3. | $\frac{7}{10}$ | 4. | $\frac{4}{5}$ |
| 5. | 1 | 6. | $\frac{3}{4}$ |
| 7. | $\frac{4}{5}$ | 8. | $\frac{7}{10}$ |
| 9. | $\frac{3}{4}$ | 10. | 1 |