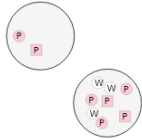




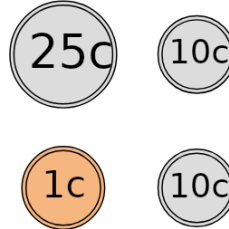
Probability

- 1 What is the equation for the chance of drawing a square at random from both bags?



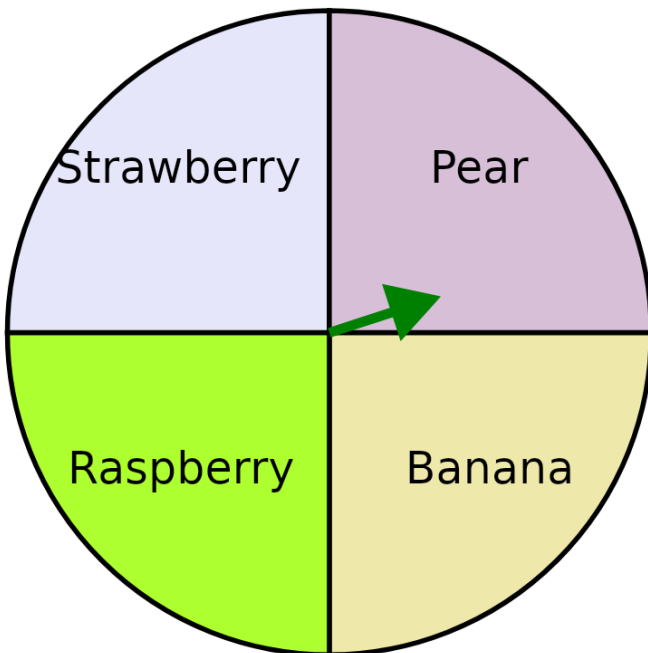
- | | | | | | |
|---|--------------------|---|--------------------|---|---------------------|
| A | $67\% \times 10\%$ | B | $17\% \times 67\%$ | C | $50\% \times 25\%$ |
| D | $60\% \times 67\%$ | E | $33\% \times 33\%$ | F | $20\% \times 100\%$ |

- 2 What is the equation for the chance of flipping heads on all these coins?



- | | |
|---|---|
| A | $0.5 \cdot 0.5 \cdot 0.5$ |
| B | $1 - 0.5 \cdot 0.5 \cdot 0.5 \cdot 0.5$ |
| C | $1 - 0.5 \cdot 0.5 \cdot 0.5$ |
| D | $0.5 \cdot 0.5 \cdot 0.5 \cdot 0.5$ |

- 3 Calculate the probability of spinning Pear twice in a row. Show as an equation



P(Pear twice)

A $\frac{1}{4} \cdot \frac{1}{4}$

B $\frac{4}{18} \cdot \frac{4}{18}$

C $\frac{1}{15} \cdot \frac{1}{15}$

D $\frac{2}{18} \cdot \frac{2}{18}$

- 4 What is the probability of getting a favourable outcome?

A fair coin is flipped and a fair six-sided die is rolled. A favourable outcome is one where the die shows a 6. There are 2 favourable outcomes.

- | | | | |
|---|---------------|---|---------------|
| A | $\frac{1}{5}$ | B | $\frac{1}{6}$ |
|---|---------------|---|---------------|

- 5 What is the probability of getting a favourable outcome?

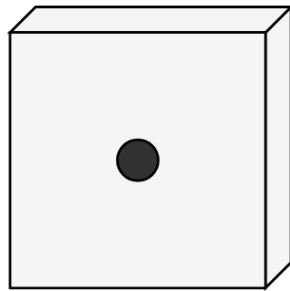
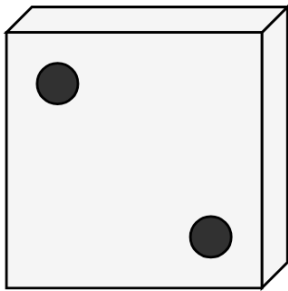
A fair coin is flipped and a spinner with red, green, and blue sections is spun. There are 6 equally likely outcomes in the sample space. A favourable outcome is one where the spinner shows red.

- | | | | |
|---|---------------|---|---------------|
| A | $\frac{1}{3}$ | B | $\frac{1}{6}$ |
|---|---------------|---|---------------|



Probability

6 What is the equation for the chance of rolling at least one 1 on these dice?



A

$$\frac{1}{6} \cdot \frac{1}{6}$$

B

$$1 - \frac{1}{6} \cdot \frac{1}{6}$$

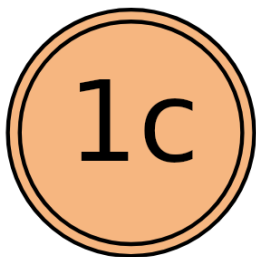
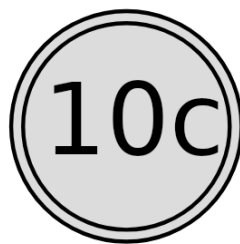
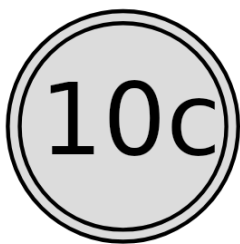
C

$$\frac{1}{6}$$

D

$$\frac{1}{6} + \frac{1}{6} - \frac{1}{6} \cdot \frac{1}{6}$$

7 What is the equation for the chance of flipping tails on all these coins?



A

$$1 - \frac{1}{2} \cdot \frac{1}{2}$$

B

$$\frac{1}{2} \cdot \frac{1}{2}$$

C

$$\frac{1}{2} \cdot \frac{1}{2} \cdot \frac{1}{2}$$

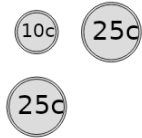
D

$$1 - \frac{1}{2} \cdot \frac{1}{2} \cdot \frac{1}{2}$$



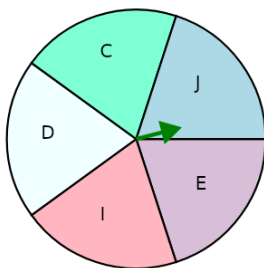
Probability

- 8** What is the chance of flipping a mixed set (not all heads or all tails) on these coins?



A	18.2%	B	66.7%	C	75%
D	55.6%	E	20%	F	133.3%

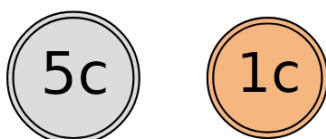
- 10** Calculate the probability of spinning I at least once, given two spins. Show as a fraction



P(I in 2 spins)

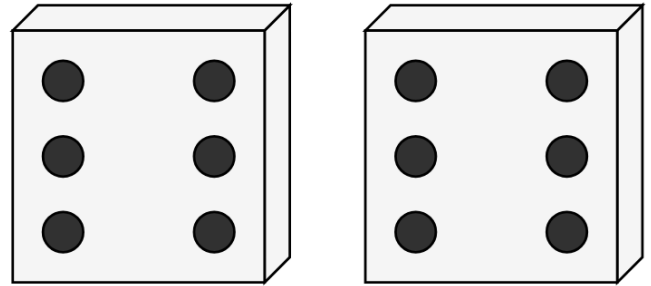
A	$\frac{6}{26}$	B	$\frac{7}{25}$
C	$\frac{9}{25}$	D	$\frac{8}{27}$
E	$\frac{13}{24}$		

- 12** What is the chance of NOT flipping both tails on these coins?



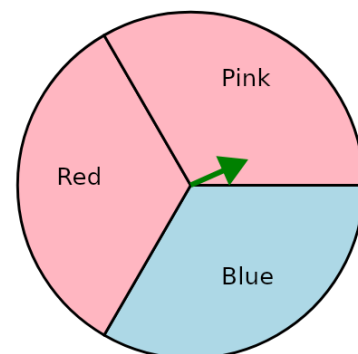
A	100%	B	25%	C	50%
D	14.3%	E	12.5%	F	75%

- 9** What is the chance of rolling a mixed set (not both the same number) on these dice?



A	$\frac{4}{6}$	B	$\frac{11}{10}$
C	$\frac{2}{15}$	D	$\frac{9}{7}$
E	$\frac{5}{6}$	F	$\frac{9}{15}$

- 11** Calculate the probability of spinning Pink at least once, given two spins. Show as a decimal



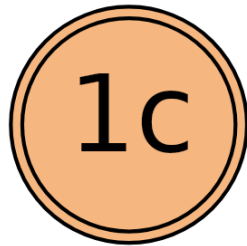
P(Pink in 2 spins)

A	0.63	B	4	C	0.56
D	0.45	E	0.89	F	1



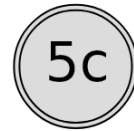
Probability

13 What is the chance of NOT flipping both tails on these coins?



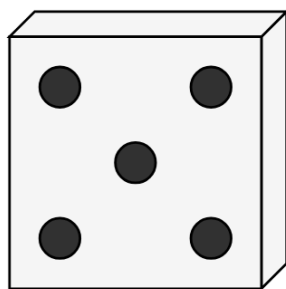
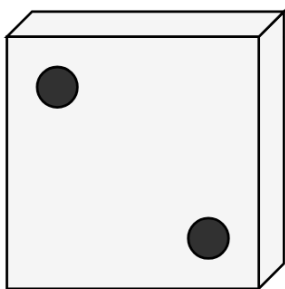
A	$\frac{6}{5}$	B	$\frac{5}{4}$
C	$\frac{3}{9}$	D	$\frac{1}{8}$
E	$\frac{4}{5}$	F	$\frac{3}{4}$

14 What is the chance of NOT flipping all tails on these coins?



A	$\frac{2}{14}$	B	$\frac{6}{9}$
C	$\frac{12}{19}$	D	$\frac{3}{15}$
E	$\frac{7}{4}$	F	$\frac{7}{8}$

15 What is the chance of NOT rolling double 4's on these dice?



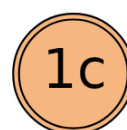
A	$\frac{65}{24}$	B	$\frac{15}{57}$
C	$\frac{64}{11}$	D	$\frac{62}{46}$
E	$\frac{35}{36}$	F	$\frac{54}{44}$

16 What is the chance of NOT flipping all tails on these coins?



A	32.4%	B	93.8%	C	230%
D	30.3%	E	30%	F	106.7%

17 What is the chance of flipping both heads or both tails on these coins?



A	0.333	B	0.75	C	1
D	0.333	E	0.333	F	0.5