

## SQA Past paper questions

## 2024 - Paper 2 - Question 3

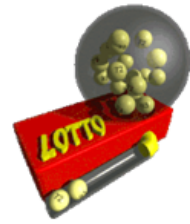
A lottery consists of a draw with 49 balls numbered from 1 to 49.

In the draw six numbered balls are drawn and not replaced.

These six numbers were 3, 7, 12, 13, 28 and 42.

A further bonus ball is then drawn.

Calculate the probability of the bonus ball being a number less than 8. 2



Click [here](#) for video solution. 

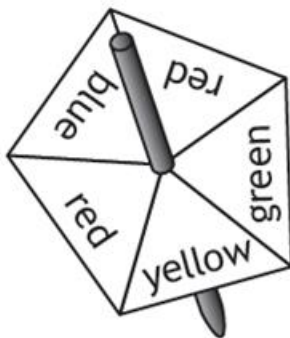
## 2023 - Paper 1 - Question 5



Eddie runs a stall at the school fundraiser.

His game requires two spinners to be spun and allowed to come to rest.

The spinners are shown.



A prize is won if one spinner lands on blue or green and the other spinner lands on an even number.

Calculate the probability of NOT winning a prize. 3

Click [here](#) for video solution. 

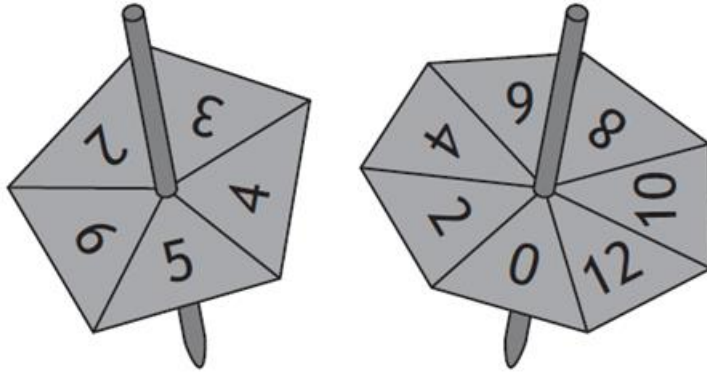
## 2022 - Paper 1 - Question 5



Jade runs a game stall at the Christmas coffee morning.

Her game requires two spinners to be spun and allowed to come to rest.

The spinners are fair and are shown below.



The numbers on which the spinners come to rest are multiplied together.

To win a prize the answer to this multiplication must be **greater than 30**.

Calculate the probability

of winning a prize.

3

Click [here](#) for video solution. 

## 2022 - Paper 1 - Question 12

A company delivers parcels to people's homes.

The probability of a parcel arriving damaged is 0.023.

In one month, the company delivered 700 parcels, of which 15 were damaged.



Determine if this is more or less than expected.

2

Click [here](#) for video solution. 

## 2021 - Paper 2 - Question 8(c)

Two of the games at the event are a lucky dip and a dice game.

The lucky dip has tickets numbered 1 to 150.

To win a prize the ticket needs to end in a zero or a five.

The dice game involves rolling two dice at the same time.

To win a prize a total of **9 or more** is needed.



Determine which game has the higher probability of a prize being won.

4

Click [here](#) for video solution. 

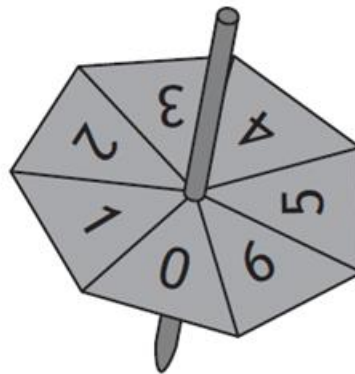
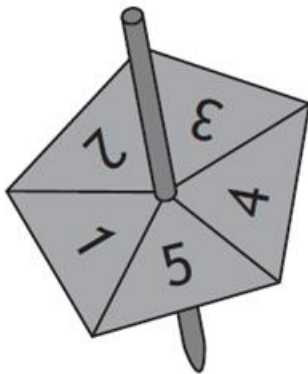
## 2018- Paper 1 - Question 14



Michael runs a stall at the school fayre.

His game requires two spinners to be spun and allowed to come to rest.

The spinners are shown below.



The numbers on which the spinners come to rest are multiplied together.

To win a prize the answer to this multiplication must be less than 5.

Calculate the probability of winning a prize.

3

Click [here](#) for video solution. 

## 2017 - Paper 2 - Question 5(d)

Mr and Mrs Sibbald went on a cruise.

They take part in an on board lottery which consists of a draw from a set of 32 balls numbered from 1 to 32.



- (d) (i) What is the probability that the first ball drawn has a number greater than 25?

1

In the draw four numbered balls are drawn and not replaced.

A further bonus ball is also drawn.

- (ii) What is the probability of the number 9 being drawn as the bonus ball if it was not drawn in the first four?

2

Click [here](#) for video solution. 

## 2014 - Paper 1 - Question 1

Mrs Abid took a survey in her mathematics class of how pupils travelled to school.

The results are shown in the table.

	Walk	Cycle	Bus
Boys	6	4	3
Girls	2	3	12



What is the probability that a pupil chosen at random is a girl who cycles to school?

Give your answer in its simplest form. 2

Click [here](#) for video solution. 