

Non-calculator Questions

City & Guilds

1.

Jon is a checkout assistant in a supermarket.

There are 5 tills and 5 assistants. The supervisor allocates the tills to the assistants randomly at the start of each day.

No one likes the till next to the door.

What is the probability that Jon will get the till next to the door today?
Give your answer as a fraction in its simplest form.

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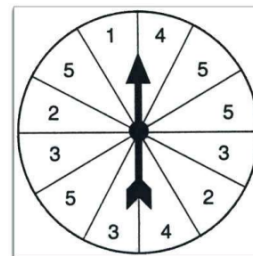
(1 mark)

2.

City & Guilds

A fair has a spin the arrow game.

A player wins a prize if the arrow lands on a 5.



What is the probability of a player winning a prize?
Write your answer as a fraction in its simplest form.

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(2 marks)

Calculator Questions

Edexcel

1.

Oscar is organising a show.

Visitors to the show choose their seats at random.

There are 350 seats available.

These seats are numbered from 1 to 350

Oscar places a prize under each of the seats numbered 17 to 25

What is the probability that the first visitor chooses a seat with a prize?

(2)

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2.

A group of dancers raised some money for a charity.

Here is some information about the money raised.

money raised (£)	number of dancers
4.99 or less	15
5 to 9.99	23
10 to 14.99	12
15 to 19.99	7
20 to 24.99	3
total	60

One of the dancers is chosen at random to give the money raised to the charity.

What is the probability that this dancer raised less than £10?

(2)

NCFE

3.

John fills a fruit bowl with 6 apples, 4 plums, 5 oranges and 3 pears.

The first customer chooses a piece of fruit at random.

What is the probability that they choose a pear?

[2 marks]

Your answer:	

4.

The class tutor has provided some snakes for the students to handle.

5 of the snakes are green and 4 are brown.

Zac is first to choose and picks a snake at random.

What is the probability that he picks a brown snake?

[1 mark]

Your answer:	

5.

Reg buys 24 wrappers. 6 of the wrappers are blue.

At the party, Reg's son is first to choose a cupcake. He picks one at random.

What is the probability that he will pick a cupcake in a blue wrapper?
Give your answer as a decimal.

[2 marks]

Your answer:	

Level 1 Probability of Simple Events Exam Questions

City & Guilds

6.

A group of friends play a game of cards.

They have already taken 9 cards from the pack.

A player wants to know the probability that the next card is ♠

Card type	Number of cards in the pack at the start	Tally of cards taken already
●	2	I
◆	4	II
♠	6	
♥	6	I
♣	4	IIII
★	2	I

What is the probability that the next card is a ♠?
Give your answer as a fraction in its simplest form.

Show your working

(3 marks)

Highfield

7.

You visit a restaurant that is holding a raffle with a cash prize. A free ticket is given to each of the 40 people in the restaurant including you and Josh.

You meet Raj and Petrina in the restaurant. They suggest that you and Josh share your raffle tickets with them and share the prize equally if you win.

Calculate the probability of winning:

- a) **with Josh**
- b) **with Josh, Raj and Petrina**

Give your answers as **fractions** and **decimals**.

Show your working out and write the answers in the box below.

(4 marks)

Fractions:

With Josh _____

With Josh, Raj and Petrina _____

Decimals:

With Josh _____

With Josh, Raj and Petrina _____

Level 1 Probability of Simple Events Exam Questions

8.a)

You are moving some swords into a new display.

Below are the weights of the swords, in kg.

1.3	2.1	1.7	2.4
0.9	1.3	1.5	1.9
1.1	1.3	2.1	2.2

What is the mean and the range of the weights of the swords?

Show your working out and write the answers in the box below.

(4 marks)

Mean: _____ Range: _____

b)

You pick up 1 of the swords at random.

What is the probability that you pick up a sword that weighs more than 2kg? Give your answer as a fraction in its simplest form.

Show your working out and write the answer in the box below.

(2 marks)

Answer: _____

Level 1 Probability of Simple Events Exam Questions

9.

Another stall has a wheel on a stand.

The wheel is divided into 32 equal sectors.

The pointer is spun and has an equal chance of landing on any sector.

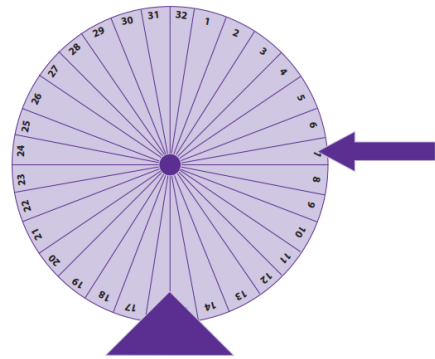
Each sector is numbered 1 - 32.

If the pointer stops on a multiple of 5, you win a prize.

What is the probability that you will win a prize with one spin?

Give your answer as a fraction in its simplest form.

Show your working out and write the answer in the box below.



(3 marks)

Answer: _____

10.

Lilly puts 3 red balls, 4 blue balls and 5 green balls in a bag.

Lilly picks one out without looking.

What is the probability that she will pick a green ball? Give your answer as a fraction.

Write the answer in the box below.

(1 mark)

Answer: _____

Open Awards

11.

A bag contains 6 red balls, 6 yellow balls and 6 blue balls. Express as a fraction the probability of picking out a blue ball. (1 mark)

Show your calculations and/or workings out here:

Write your answer in this box.

AQA

12.

A fair ordinary six-sided dice is rolled.

Write down the probability that it lands on a number **greater than 4**

Give your answer as a fraction.

[1 mark]

Answer _____

13.

The table shows information about flight delays for 60 flights to Turkey.

Flight delays to Turkey	
Delay time	Number of flights
No delay	36
Less than 1 hour	13
1 hour to 3 hours	8
More than 3 hours	3

Estimate the probability that Jack's flight will be delayed by **at least** 1 hour.

Use the data in the table.

[2 marks]

Answer _____