Maths-it Podcast F-21



Foundation GCSE Revision

Probability

Topics

Calculating probability – Understanding probability – Possible outcomes – Experimental probability

Questions

(b)

1. Laura's mum and dad share the cooking. Only one of them cooks each night.

Laura says the probability that her dad will cook tea tonight is 0.75 and the probability that her mum will cook is 0.35

Laura is wrong. Explain why.

(Total 1 mark)

2. Sarah rolls an unbiased, 6-sided die. She gets a five.

Sarah's twin sister then rolls the same die.

What is the probability that she will get a six? (a)

..... (1) Sarah rolls the die 60 times. Explain why she may not get exactly 10 six's.

.....

(1) (Total 2 marks)

3. Mr Green buys a piece of fruit for his lunch from the market each day. He chooses an apple or an orange or a banana.

The probability that he chooses an apple is 0.4 The probability that he chooses an orange is 0.15

Work out the probability that Mr Green chooses a banana.

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4. Rob and Brian have magnetic letters to make their names. They each put their letters in a different box. They each take a letter from their box at random.



(a) List **all** the pairs of letters they could pick. One pair (R, B) is shown.

(R, B)

(b) What is the probability that their letters are the same?

(1) (Total 3 marks)

5. 60 children attend swimming lessons at the local pool. The classes are graded into 'Ducks', 'Turtles' and 'Dolphins'.

The two-way table shows some information about these childrens.

	Ducks	Turtles	Dolphins	Total
Female	3			32
Male		11		28
Total	10	28		60

(a) Complete the two-way table.

One of these students is to be picked at random.

(b) Write down the probability that the student picked is in the Ducks class.

(1) (Total 3 marks)

(2)

(2)





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6. The table shows information about the number of pets the students in a class had last year.

Number of pets	Number of students	
0	7	
1	14	
2	1	
3	2	
More than 3	6	

The headteacher is to choose a student at random from the class.

Find the probability that she will choose a student who had

- (a) exactly 1 pet,
- (1) (b) 2 or more pets, (c) either 1 filling or 2 pets. (1) (Total 3 marks)
- The probability that a drawing pin will land pin down when dropped is 0.4 Layla is going to drop the pin 300 times.
 - (a) Work out an estimate for the number of times the drawing pin will land pin down.

