



New Maths GCSE: P2 & P3 - Expected Frequencies

Name:

Date:

I toss a biased coin 200 times I get these results:

	Frequency
Heads	150
Tails	50

I toss the coin 500 times, how many times would I expect Heads?

A) B)

C) D)

www.coopsonline.co.uk

Correct Answer: A B C D

Explanation:

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I record all the different vehicles travelling down my road. Here are the results:

Vehicle	Frequency
Car	10
Bike	6
Van	4

What is the probability that the next vehicle will be **a car**

A) B)

C) D)

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Correct Answer: A B C D

Explanation:

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I record all the different vehicles travelling down my road. Here are the results:

Vehicle	Frequency
Car	10
Bike	6
Van	4

What is the probability that the next vehicle will be **a bike**

A) B)

C) D)

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Correct Answer: A B C D

Explanation:

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I record all the different vehicles travelling down my road. Here are the results:

Vehicle	Frequency
Car	10
Bike	6
Van	4

If 80 vehicles pass by, how many would I expect to be **cars**?

A) B)

C) D)

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Correct Answer: A B C D

Explanation:

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I record all the different vehicles travelling down my road. Here are the results:

Vehicle	Frequency
Car	10
Bike	6
Van	4

If 60 vehicles pass by, how many would I expect to be **bikes**?

A) B)

C) D)

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Correct Answer: A B C D

Explanation:

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I toss a coin 200 times, how many times would I expect to get a "head"?

A) B)

C) D)

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Correct Answer: A B C D

Explanation:

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I roll a dice 60 times how many times would I expect to get a number less than 4?

A) B)

C) D)

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Correct Answer: A B C D

Explanation:

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I roll a dice 240 times how many times would you expect to get a square number?

A) B)

C) D)

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Correct Answer: A B C D

Explanation:

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I probability that I will miss my bus is $\frac{2}{7}$. How many times do I expect to miss it in 2 weeks?

A) B)

C) D)

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Correct Answer: A B C D

Explanation:

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I probability that I win when I play my friend at chess is $\frac{4}{9}$. How many times do I expect to loose if I play 27 games?

A) B)

C) D)

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Correct Answer: A B C D

Explanation:

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EXPECTATION

I roll a dice 120 times. How many 1s might I expect to roll?

a) $\frac{1}{120}$ b) $\frac{20}{120}$ c) 10 d) 20

Correct Answer: A B C D

Explanation:

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EXPERIMENTS



A spinner has four **equal** sections on it; red, green, white and purple. I spin it 100 times and get the results in the table. Which of the following is **not** true.

Colour	Frequency
Red	35
Green	25
White	27
Purple	13

- a) I got more reds because of luck
- b) If I repeat the experiment more times, I expect the results to eventually even out
- c) The spinner is definitely biased to red
- d) The experimental probability of getting green is $\frac{1}{4}$

Correct Answer: A B C D

Explanation:

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