

GCSE Exam Questions

Frequency Trees | Probability



GCSE Exam Questions: Frequency Trees

1) (a) A class has 29 children.

14 of the children are girls.

11 of the girls have done their homework.

9 of the boys have done their homework.

Complete the frequency tree.



(3)

(b) A student is picked at random.

Work out the probability that the student is a girl who has **not** done her homework.

(2)

(5 marks)



GCSE Exam Questions: Frequency Trees

2) (a) A computer game company surveyed 20 adults and 30 children about a new game.

12 adults and 19 children liked the new game.

Complete the frequency tree.



(3)

(b) A person is picked at random.

Work out the probability that the person is a child who does **not** like the new game.

(2) (5 marks)



GCSE Exam Questions: Frequency Trees

3) (a) 82 men and 68 women visit a restaurant.

80 of these people have a voucher.

Four times as many men have a voucher as women who have a voucher.

Complete the frequency tree.



(4)

(b) A person is picked at random.

Work out the probability that the person is a man without a voucher.

(2) (6 marks)



GCSE Exam Questions: Frequency Trees Answers

	Question	Answer	Marks
1) (a)	A class has 29 students. 14 of the students are girls. 11 of the girls have done their homework and 9 of the boys have done their homework Complete the frequency tree. Done homework Girls Not done homework Not done homework Not done homework	(a) Done homework 11 Girls 14 Not done homework 3 Boys 15 Done homework 9 Not done homework 6 For 1-2 correct entries For 3-5 correct entries For all 6 correct entries	(1) (1) (1)
(b)	A student is picked at random. Work out the probability that the student is a girl who has NOT done her homework.	(b) $\frac{3}{x}$ or $\frac{x}{29}$ $\frac{3}{29}$	(1) (1)
2) (a)	A computer game company surveyed 20 adults and 30 children about a new game. 12 adults and 19 children liked the new game. Complete the frequency tree. \underbrace{Like}_{Ke}	(a) Like 12 Not like 8 Children 30 Not like 19 Not like 11 For 1-2 correct entries For 3-5 correct entries For all 6 correct entries	(1) (1) (1)
(b)	A person is picked at random. Work out the probability that the person is a child who does NOT like the new game.	(b) $\frac{11}{x}$ or $\frac{x}{50}$ $\frac{11}{50}$	(1) (1)

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GCSE Exam Questions: Frequency Trees Answers

	Question	Answer	Marks
3) (a)	82 men and 68 women visit a restaurant. 80 of these people have a voucher. Four times as many men have a voucher as women who have a voucher. Complete the frequency tree. Voucher	(a) Voucher 64 No voucher 64 No voucher 18 No voucher 16 No voucher 52 For 150 or 68 in the correct place 150 - 70 = 80 For 64 and 16 in the correct places For 18 and 52 in the correct places	(1) (1) (1) (1)
(b)	A person is picked at random. Work out the probability that the person is a man without a voucher.	(b) $\frac{18}{x}$ or $\frac{x}{150}$ $\frac{18}{150}$ oe	(1) (1)

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