

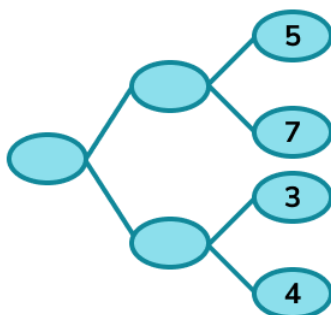
Frequency Trees - Worksheet

Skill

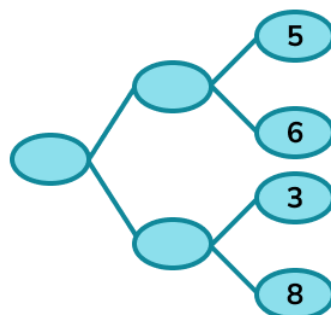
Group A - Addition only

Complete the frequency tree:

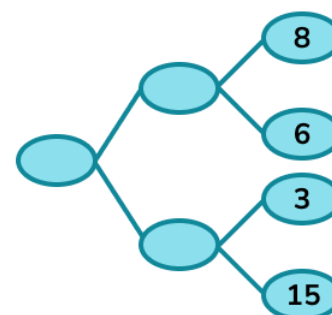
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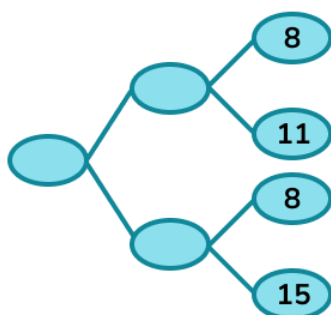
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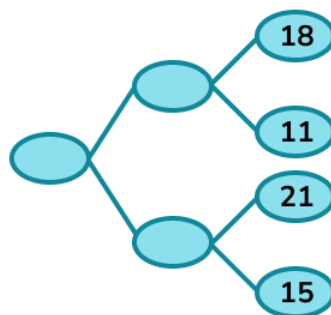
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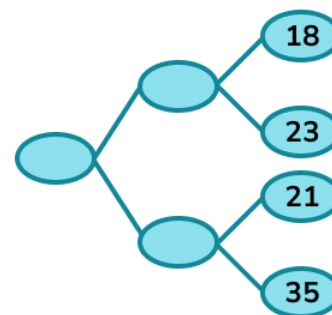
4)



5)



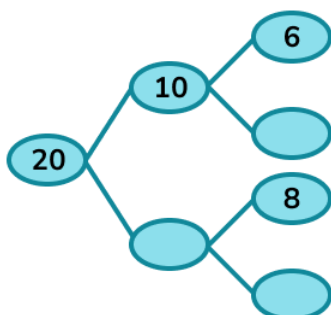
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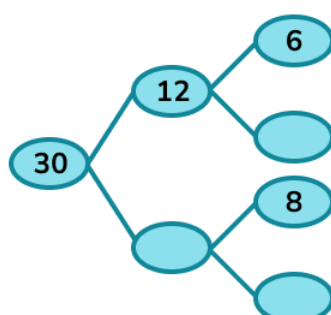
Group B - Subtraction only

Complete the frequency tree:

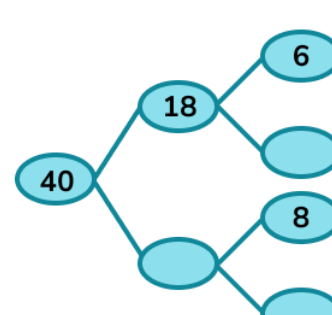
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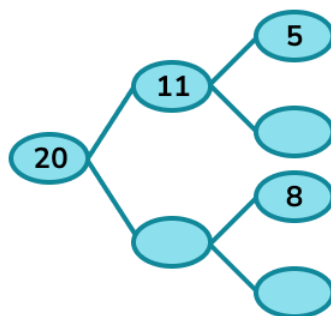
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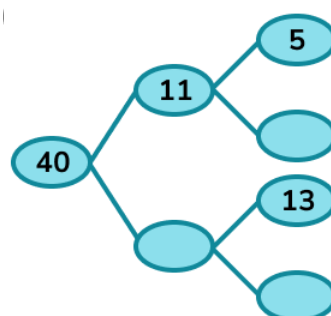
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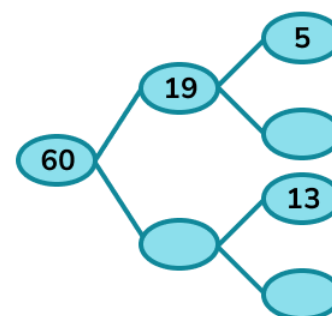
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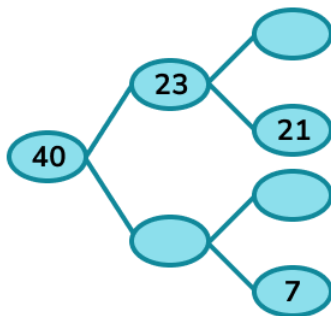


Frequency Trees - Worksheet

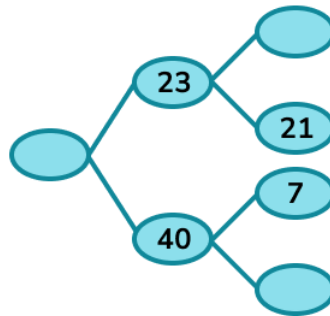
Group C - Mixed addition and subtraction

Complete the frequency tree:

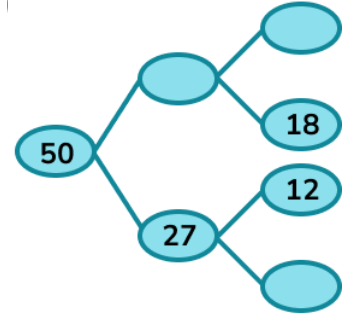
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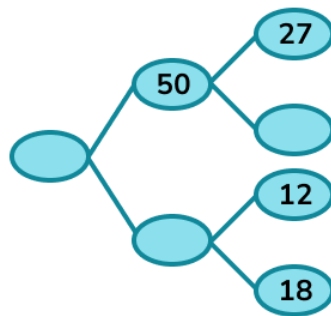
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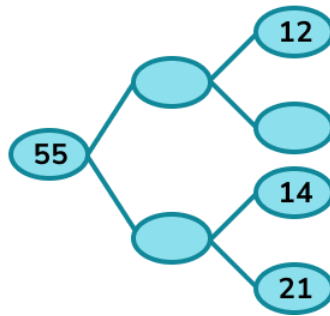
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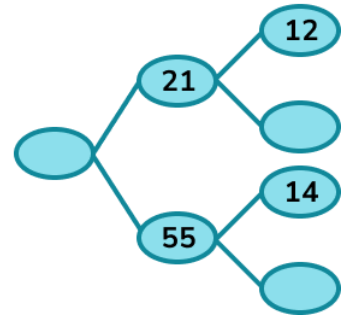
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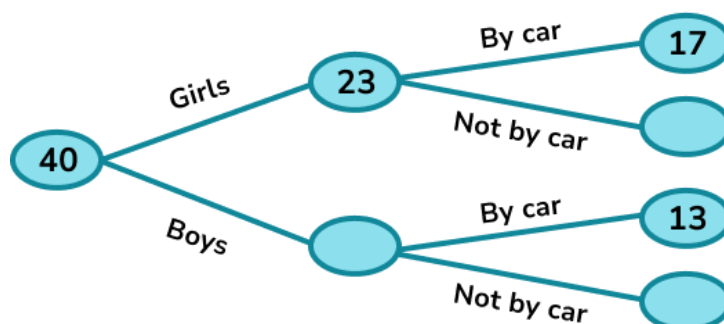


Frequency Trees - Worksheet

Applied

- 1) (a) There are 40 children at a pre-school.
There are 23 girls.
17 of the girls and 13 of the boys travel by car to pre-school.

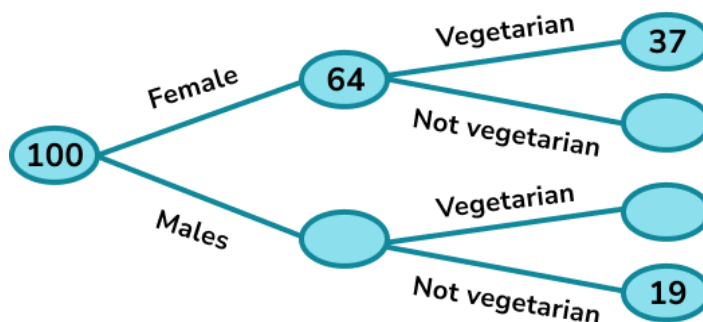
Complete the frequency tree.



- (b) A child is picked at random.
Work out the probability that they are a boy who does NOT travel by car to pre-school.

- 2) (a) 100 adults work in a factory.
64 of the workers are female.
37 of the females are vegetarian.
19 of the males are NOT vegetarian.

Complete the frequency tree.

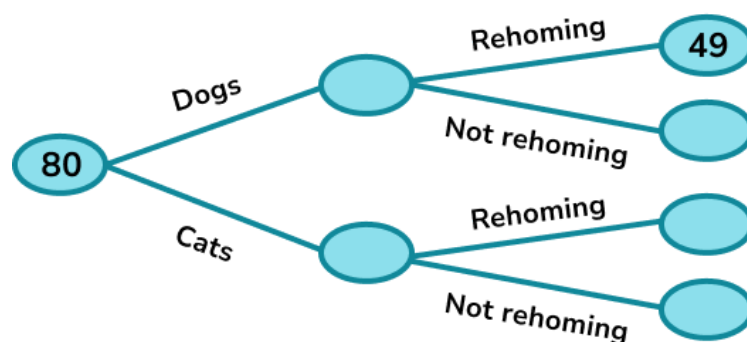


- (b) A worker is picked at random.
Work out the probability that they are a male who is vegetarian.

Frequency Trees - Worksheet

- 3) (a) There are 80 animals in a shelter.
 $\frac{4}{5}$ of the animals are dogs and the rest are cats.
 63 of the animals are ready to be rehomed.
 49 of the dogs are ready for rehoming.

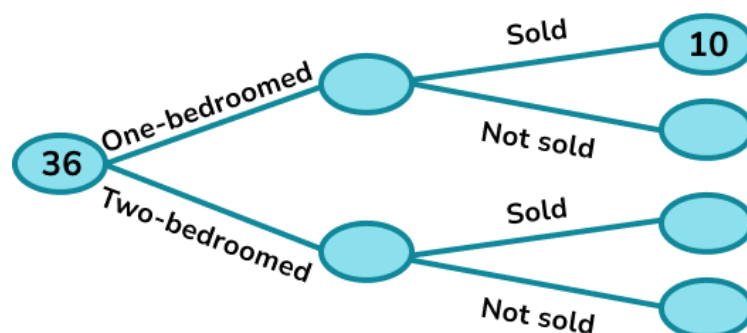
Complete the frequency tree.



- (b) An animal is picked at random.
 Work out the probability that they are a cat who is ready to be rehomed.

- 4) (a) A new block of flats has been built.
 There are 36 flats.
 The flats are one-bedroomed or two-bedroomed in the ratio 1: 2.
 27 of the flats have been sold, including 10 of the one-bedroomed flats.

Complete the frequency tree.



- (b) A flat is picked at random.
 Work out the probability that the flat is two-bedroomed and has NOT been sold.

Frequency Trees - Exam Questions

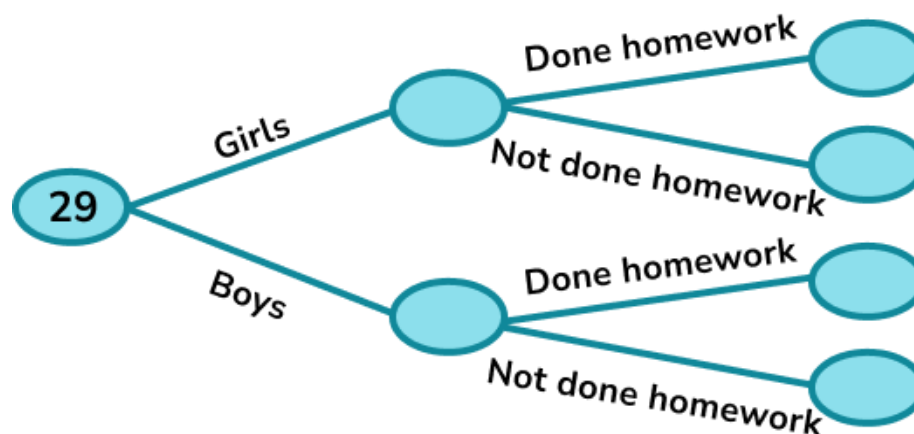
- 1) (a) A class has 29 children.

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)

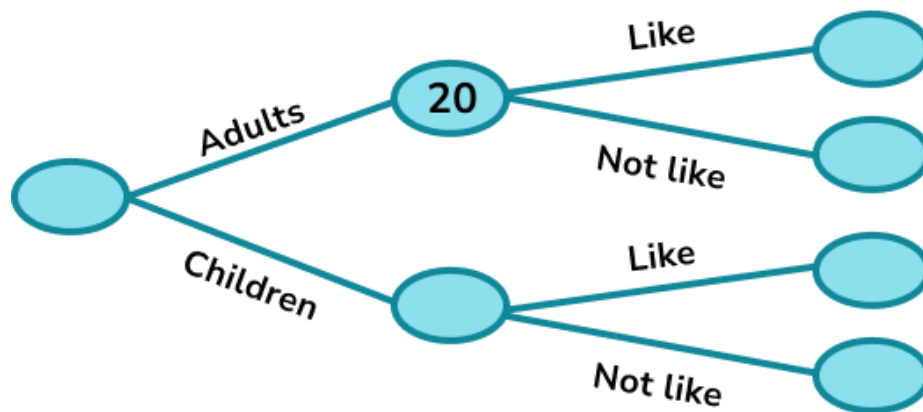
(5 marks)

Frequency Trees - Exam Questions

- 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.

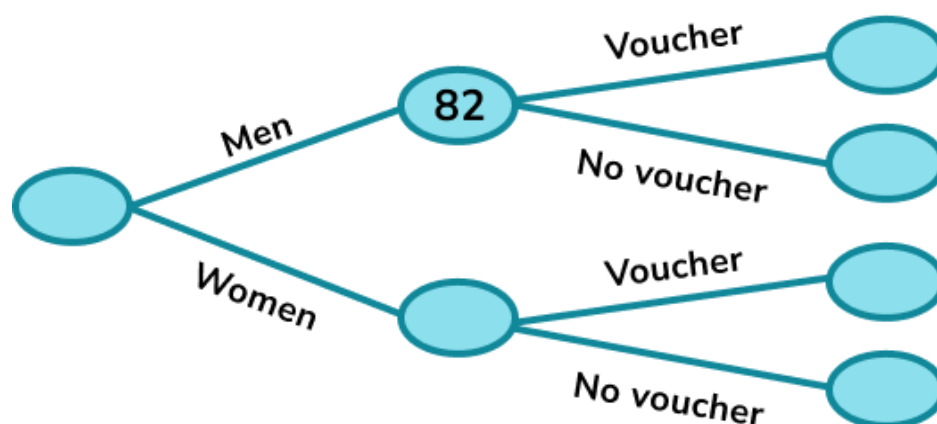
Work out the probability that the person is a child who does **not** like the new game.

.....
(2)
(5 marks)

Frequency Trees - Exam Questions

- 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.



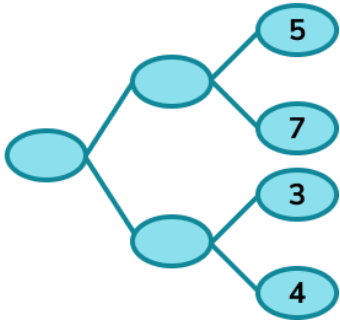
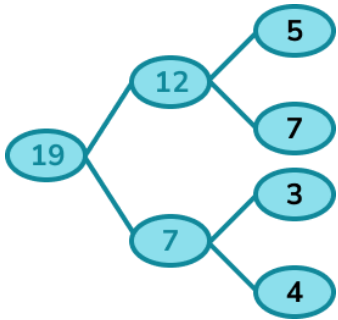
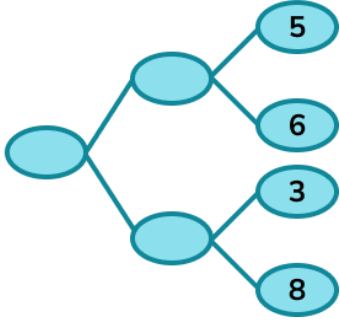
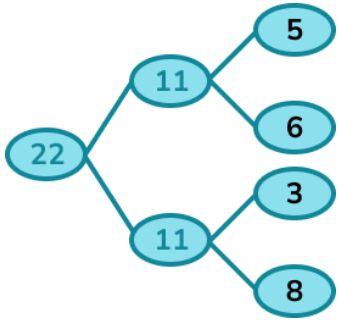
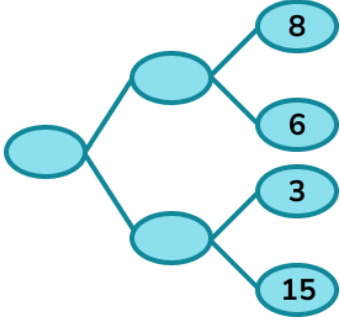
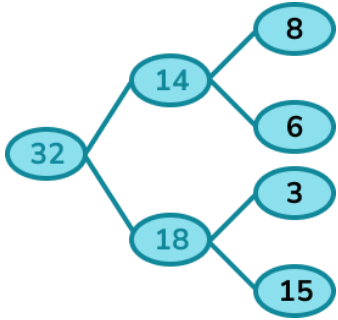
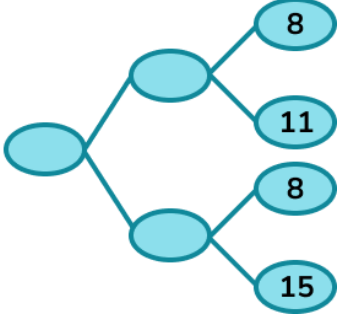
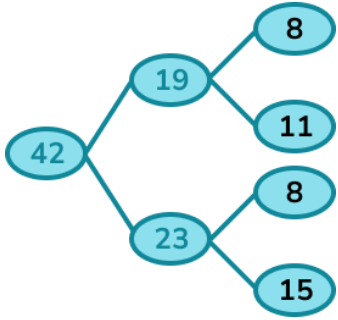
(4)

- (b) A person is picked at random. Work out the probability that the person is a man without a voucher.

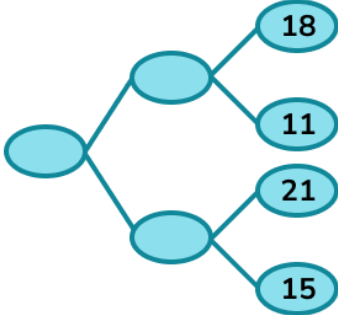
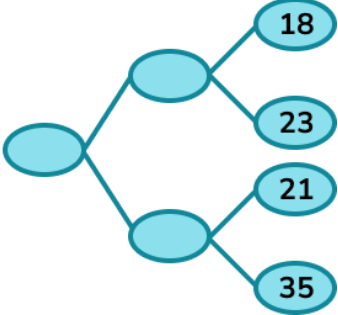
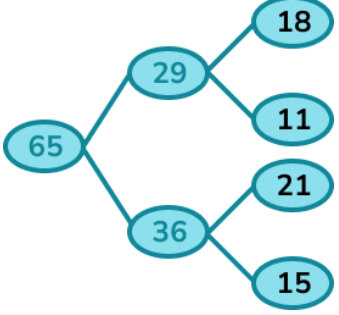
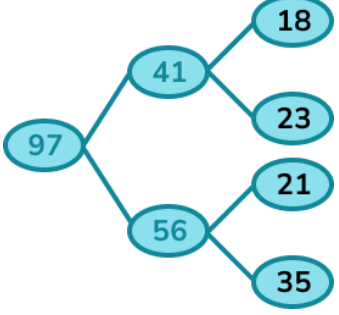
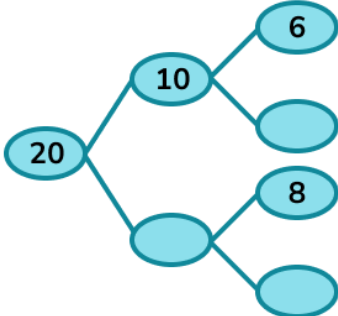
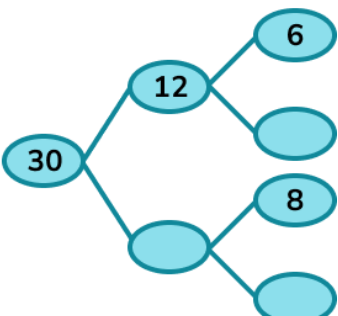
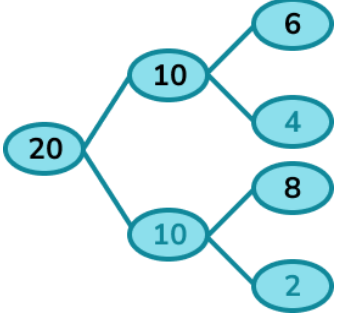
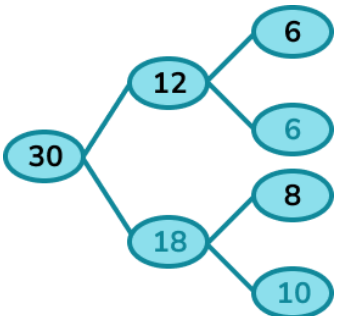
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(6 marks)

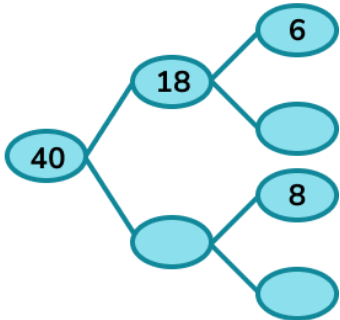
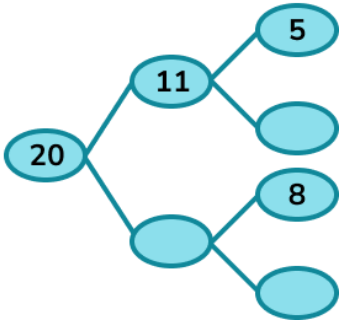
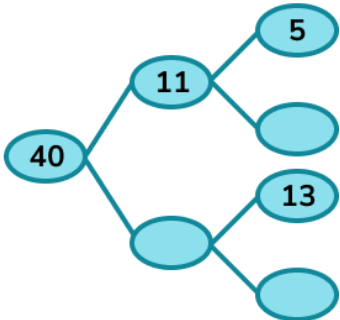
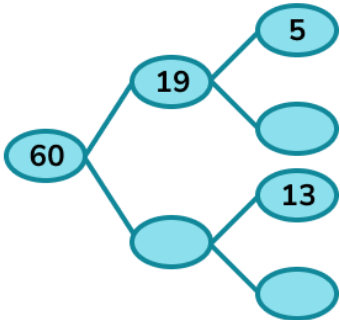
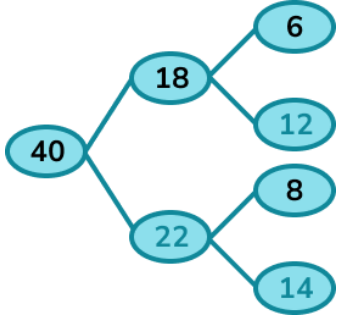
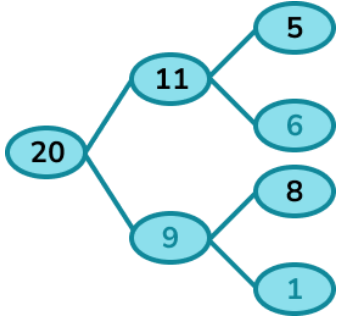
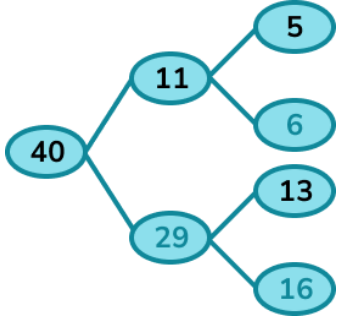
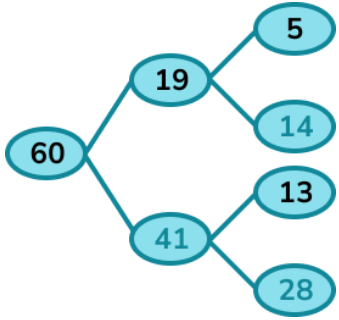
Frequency Trees - Answers

	Question	Answer
	Skill Questions	
Group A	Complete the frequency tree:	
	<p>1)</p> 	<p>1)</p> 
	<p>2)</p> 	<p>2)</p> 
	<p>3)</p> 	<p>3)</p> 
	<p>4)</p> 	<p>4)</p> 

Frequency Trees - Answers

Group A contd	<p>5)</p>  <p>6)</p> 	<p>5)</p>  <p>6)</p> 
Group B	<p>Complete the frequency tree:</p> <p>1)</p>  <p>2)</p> 	<p>1)</p>  <p>2)</p> 

Frequency Trees - Answers

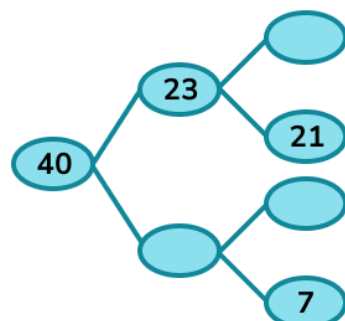
Group B contd	<p>3)</p>  <p>4)</p>  <p>5)</p>  <p>6)</p> 	<p>3)</p>  <p>4)</p>  <p>5)</p>  <p>6)</p> 
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Frequency Trees - Answers

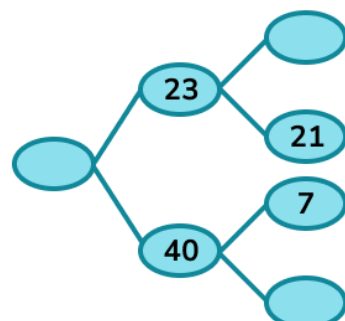
Group C

Complete the frequency tree:

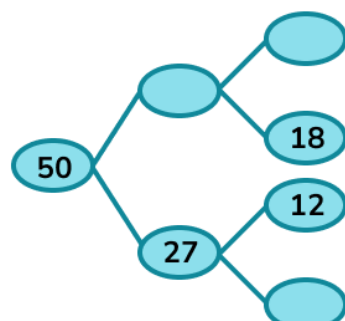
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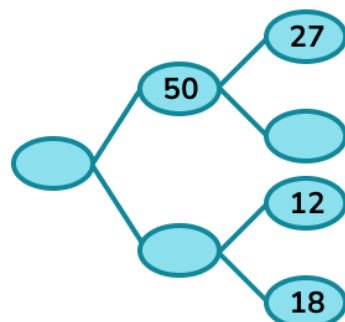
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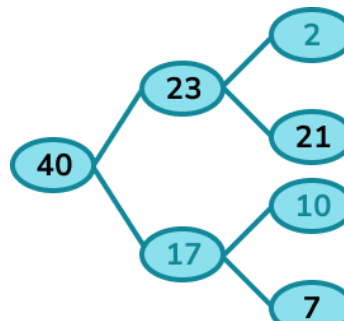
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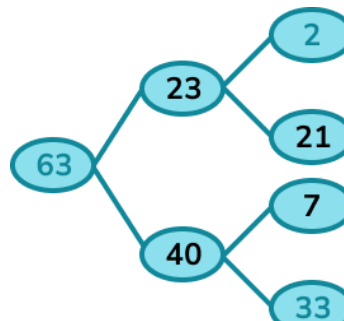
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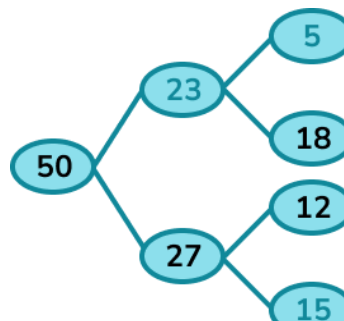
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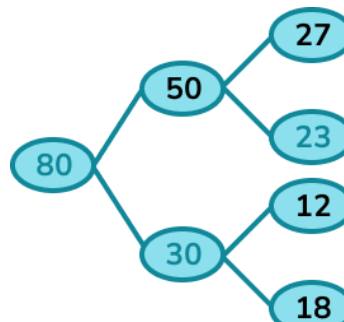
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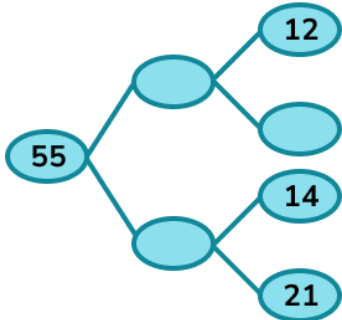
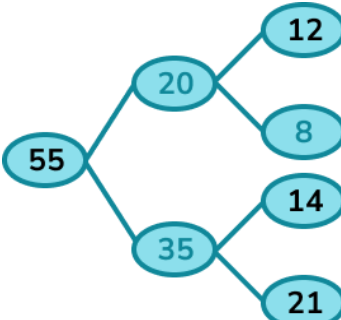
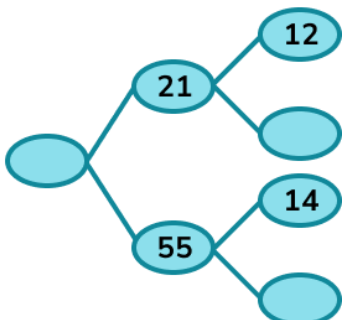
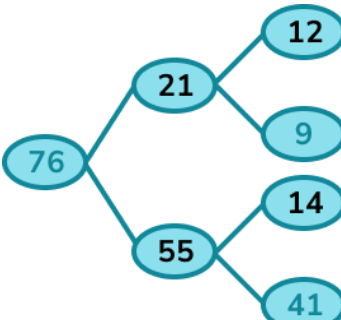
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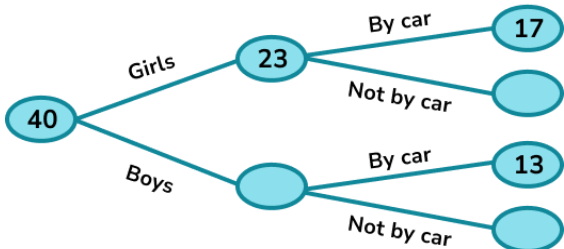
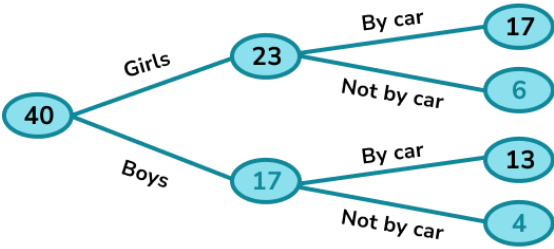
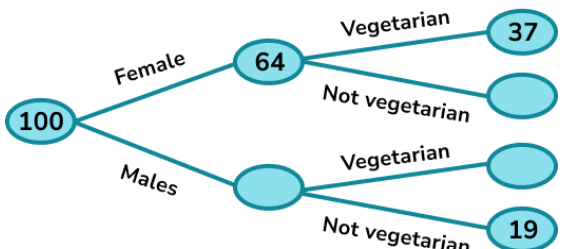
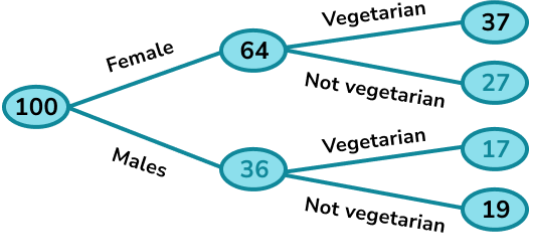
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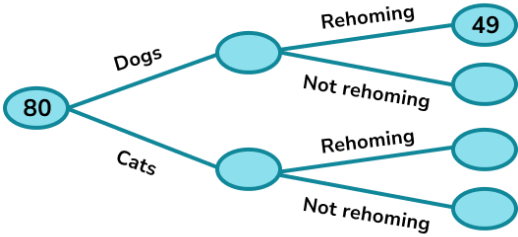
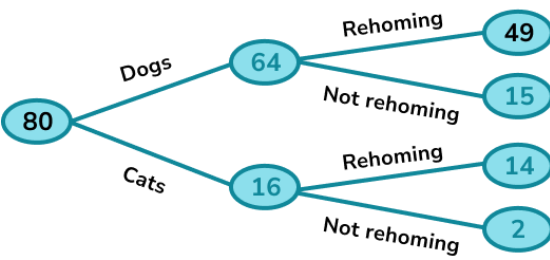
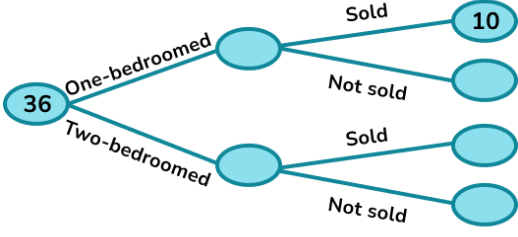
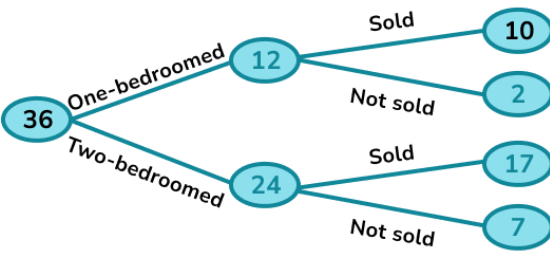
Frequency Trees - Answers

Group C contd	<p>5)</p> 	<p>5)</p> 
	<p>6)</p> 	<p>6)</p> 

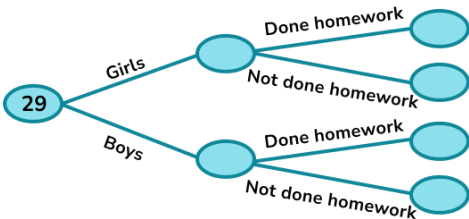
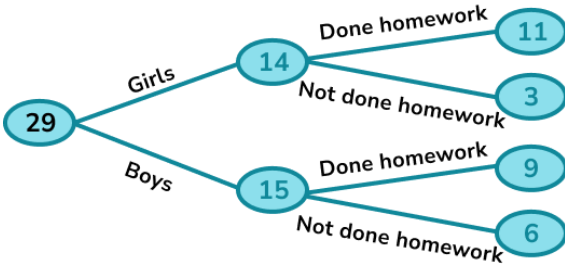
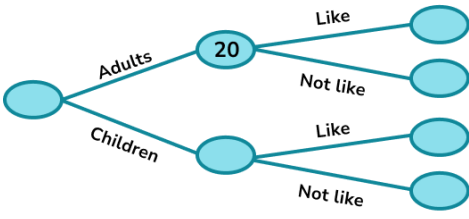
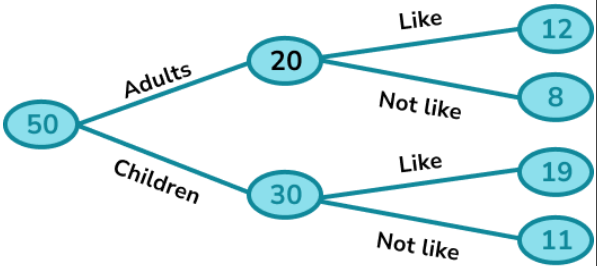
Frequency Trees - Answers

	Question	Answer
	Applied Questions	
1)	<p>a) There are 40 children at a pre-school. There are 23 girls. 17 of the girls and 13 of the boys travel by car to pre-school.</p> <p>Complete the frequency tree</p>  <p>b) A child is picked at random. Work out the probability that they are a boy who does not travel by car to pre-school.</p>	<p>a)</p>  <p>b) $\frac{4}{40} = \frac{1}{10}$</p>
2)	<p>a) 100 adults work in a factory. 64 of the workers are female. 37 of the females are vegetarian. 19 of the males are NOT vegetarian.</p> <p>Complete the frequency tree.</p>  <p>b) A worker is picked at random. Work out the probability that they are a male who is vegetarian.</p>	<p>a)</p>  <p>b) $\frac{17}{100}$</p>

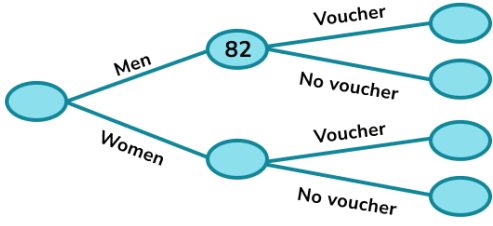
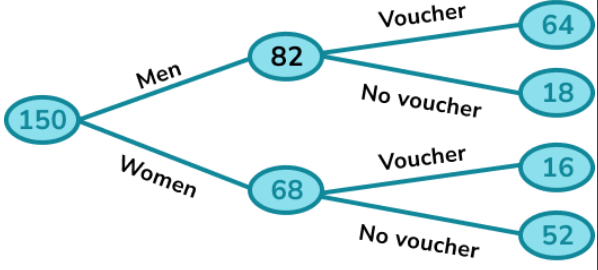
Frequency Trees - Answers

3)	<p>a) There are 80 animals in a shelter. $\frac{4}{5}$ of the animals are dogs and the rest are cats. 63 of the animals are ready to be rehomed. 49 of the dogs are ready for rehoming.</p> <p>Complete the frequency tree.</p>  <p>b) An animal is picked at random. Work out the probability that they are a cat who is ready to be rehomed.</p>	<p>a)</p>  <p>b) $\frac{14}{80} = \frac{7}{40}$</p>
4)	<p>a) A new block of flats has been built. There are 36 flats. The flats are one-bedroomed or two-bedroomed in the ratio 1: 2. 27 of the flats have been sold, including 10 of the one-bedroomed flats.</p> <p>Complete the frequency tree.</p>  <p>b) A flat is picked at random. Work out the probability that the flat is two-bedroomed and has NOT been sold.</p>	<p>a)</p>  <p>b) $\frac{7}{36}$</p>

Frequency Trees - Mark Scheme

	Question	Answer	
	Exam Questions		
1) (a)	<p>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.</p> 	<p>(a)</p>  <p>For 1-2 correct entries For 3-5 correct entries For all 6 correct entries</p>	<p>(1) (1) (1)</p>
(b)	<p>A student is picked at random. Work out the probability that the student is a girl who has NOT done her homework.</p>	<p>(b) $\frac{3}{x}$ or $\frac{x}{29}$</p> <p>$\frac{3}{29}$</p>	<p>(1) (1)</p>
2) (a)	<p>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.</p> 	<p>(a)</p>  <p>For 1-2 correct entries For 3-5 correct entries For all 6 correct entries</p>	<p>(1) (1) (1)</p>
(b)	<p>A person is picked at random. Work out the probability that the person is a child who does NOT like the new game.</p>	<p>(b) $\frac{11}{x}$ or $\frac{x}{50}$</p> <p>$\frac{11}{50}$</p>	<p>(1) (1)</p>

Frequency Trees - Mark Scheme

3) (a)	<p>82 men and 68 women visit a restaurant.</p> <p>80 of these people have a voucher.</p> <p>Four times as many men have a voucher as women who have a voucher.</p> <p>Complete the frequency tree.</p> 	<p>(a)</p>  <p>For 150 or 68 in the correct place (1)</p> <p>$150 - 70 = 80$ (1)</p> <p>For 64 and 16 in the correct places (1)</p> <p>For 18 and 52 in the correct places (1)</p>	
(b)	<p>A person is picked at random. Work out the probability that the person is a man without a voucher.</p>	<p>(b) $\frac{18}{x}$ or $\frac{x}{150}$ (1)</p> <p>$\frac{18}{150}$ oe (1)</p>	

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