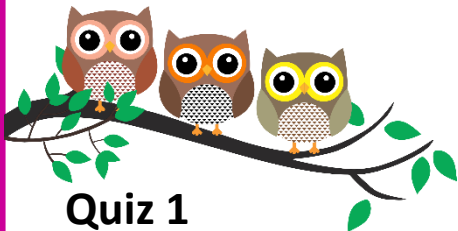


Higher Interleaving Quiz

Branch 13

Quizzes 1 to 3



Quiz 1

Q	Topic	Σ	R	A	G
1	Standard Form				
2	Factorise and solve				
3	Transformation				
4	Cumulative Frequency				

Home Study Focus

Home Study
Completed

Quiz 2

Q	Topic	Σ	R	A	G
1	Reverse Percentage Problem				
2	Forming an Equation				
3	Right Angled Trigonometry				
4	Histogram				

Home Study Focus

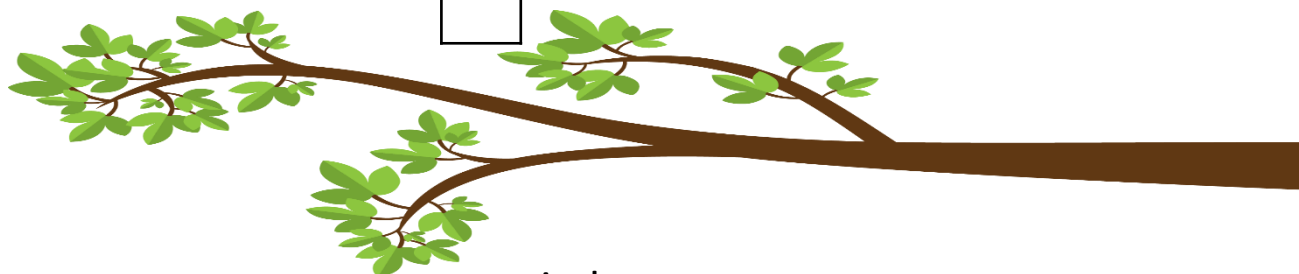
Home Study
Completed

Quiz 3

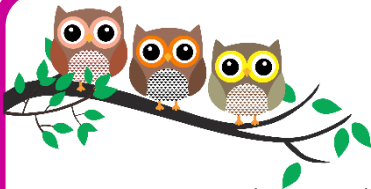
Q	Topic	Σ	R	A	G
1	Ratio Problem				
2	Iteration				
3	PAV Problem				
4	Frequency Tree				

Home Study Focus

Home Study
Completed



Higher Interleaving Quiz



Branch 13 Quiz 1

- 1) $(7 \times 10^a) + (7 \times 10^b) + (7 \times 10^c) = 707.07$
Write down a possible set of values for a, b and c .
(3 marks)

$a =$ _____ $b =$ _____ $c =$ _____

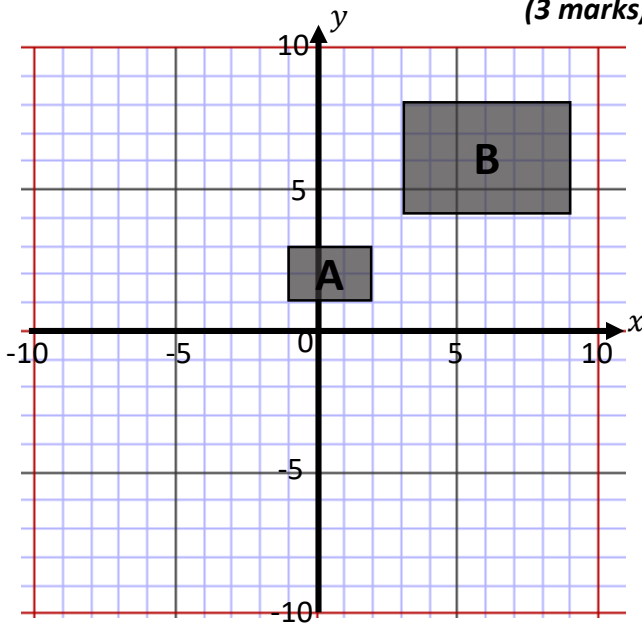
- 2) a) Factorise $9x^2 - 36$ (1 mark)

Answer: _____

- b) Factorise and solve $x^2 - 13x + 12 = 0$ (3 marks)

Answer: _____

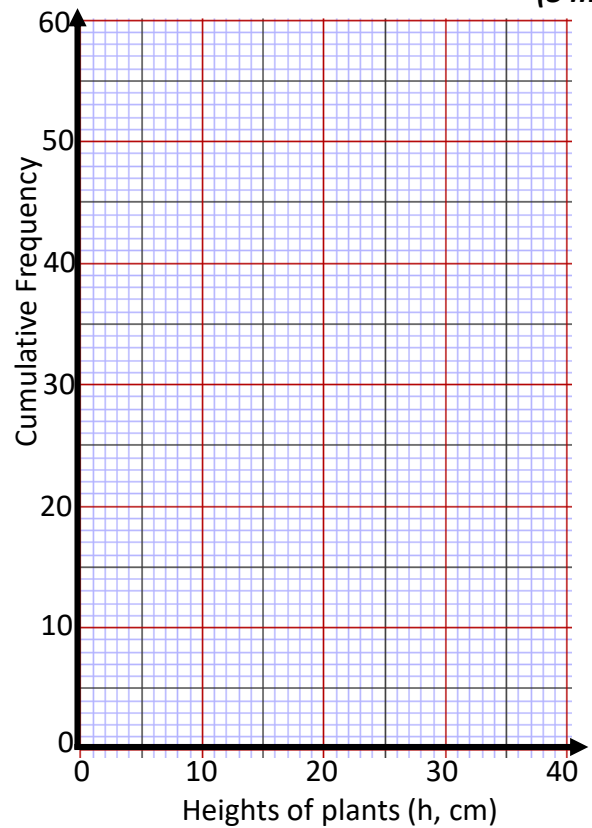
- 3) Describe the transformation from A to B. (3 marks)



- 4) The heights of 50 plants were recorded by a gardener. The results are shown in the table.

Height (h) in cm	Frequency		
$0 < h \leq 15$	12		
$15 < h \leq 25$	13		
$25 < h \leq 30$	17		
$30 < h \leq 40$	8		

- a) On the grid, draw a cumulative frequency graph to represent the information. (3 marks)

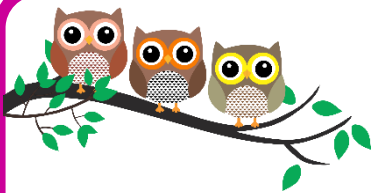
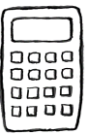


- b) How many plants were more than 32cm tall? (2 marks)

Answer: _____

Q	Topic	Σ	R	A	G
1	Standard Form				
2	Factorise and solve				
3	Transformation				
4	Cumulative Frequency				

Higher Interleaving Quiz

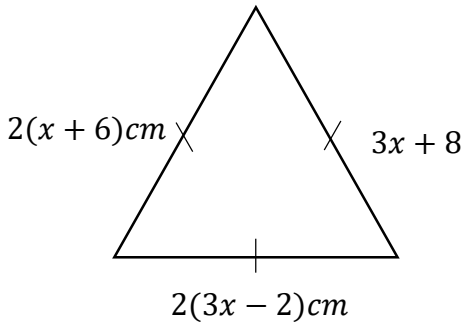


Branch 13 Quiz 2

- 1) In a sale, normal prices are reduced by $\frac{1}{5}$.
The normal price of a cornet is reduced by £150. Work out the normal price of the cornet. **(3 marks)**

Answer: _____

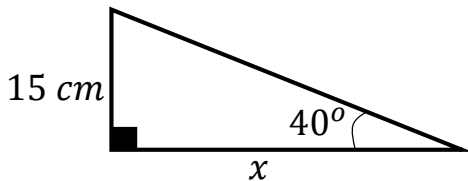
- 2) Here is an equilateral triangle. **(4 marks)**



What is the perimeter?

Answer: _____

- 3) Work out the value of x . **(2 marks)**
Give your answer to 1 decimal place.

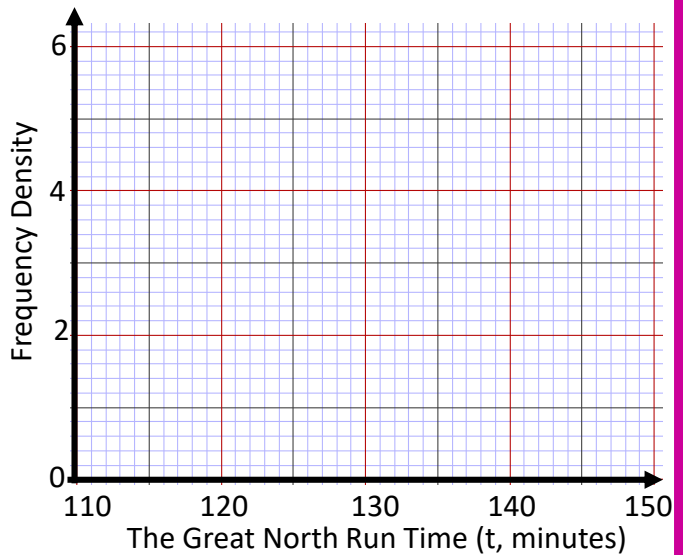


Answer: _____

- 4) Anna carried out a survey of the London Half Marathon times of 80 runners.

time (t) in mins	Frequency		
$110 < t \leq 120$	7		
$120 < t \leq 130$	26		
$130 < t \leq 145$	30		
$145 < t \leq 150$	17		

- a) On the grid, draw a histogram for the information in the table. **(3 marks)**

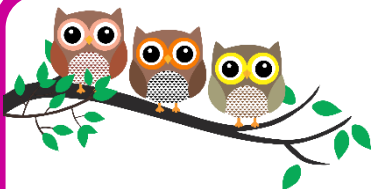
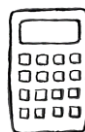


- b) A reporter states that a half of the runners took over 140 minutes to complete the Great North Run. Does Anna's Survey support the statement?

Yes No **(3 marks)**

Q	Topic	Σ	R	A	G
1	Reverse Percentage Problem				
2	Forming an Equation				
3	Right Angled Trigonometry				
4	Histogram				

Higher Interleaving Quiz



Branch 13 Quiz 3

- 1) Red paint costs £2.80 per litre.
Blue paint costs £3.10 per litre
Red and blue paint are mixed together in the ratio of 5:2 to make purple paint.
Work out the cost of 35 litres of purple paint.

(4 marks)

Answer: _____

- 2) An approximate solution to an equation is found using this iterative process.

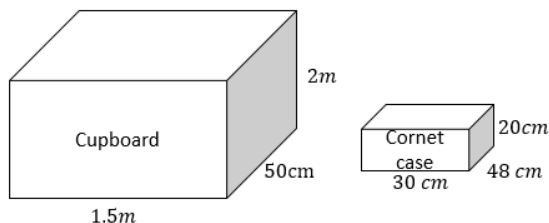
$$x_{n+1} = \frac{x_n^3 - 3}{5} \text{ and } x_1 = -1$$

Work out the solution to 3 decimal places.

(3 marks)

Answer: _____

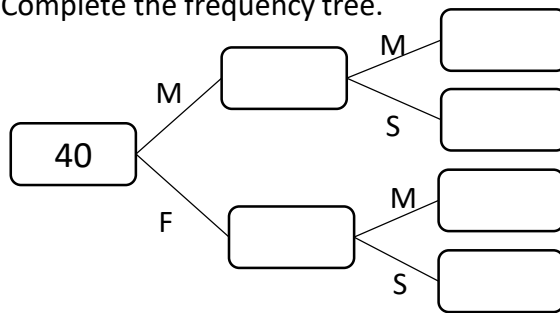
- 3) A band are trying to store a new set of cornets in a cupboard. How many cornet cases fit into the cupboard? **(3 marks)**



Answer: _____

- 4) 40 passengers were on a band bus.
20 people were male.
Male musicians to Supporters were in the ratio of 4:1
28 musicians in total **(3 marks)**

- a) Complete the frequency tree.



- b) What proportion of the passengers were female musicians? **(1 marks)**

Answer: _____

Q	Topic	Σ	R	A	G
1	Ratio Problem				
2	Iteration				
3	PAV Problem				
4	Frequency Tree				