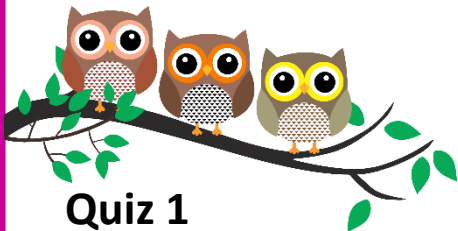


Higher Interleaving Quiz

Branch 12

Quizzes 1 to 3



Quiz 1

Q	Topic	Σ	R	A	G
1	Product of Prime Factors				
2	Factorise and Solve				
3	Circle Theorems				
4	Probability Tree				

Home Study Focus

Home Study
Completed

Quiz 2

Q	Topic	Σ	R	A	G
1	Percentage Problem				
2	Simultaneous Equations				
3	Surface Area Problem				
4	Averages from a Table				

Home Study Focus

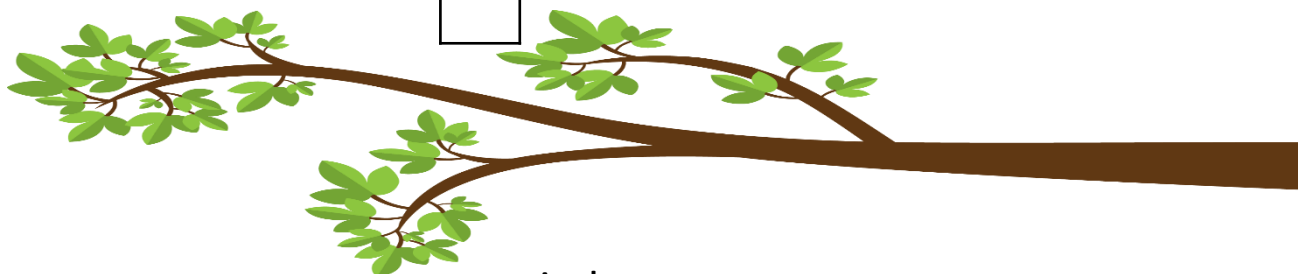
Home Study
Completed

Quiz 3

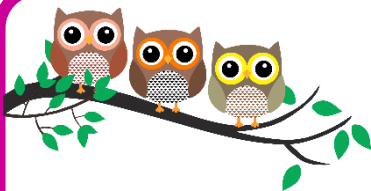
Q	Topic	Σ	R	A	G
1	Ratio Problem				
2	Expand and Simplify				
3	Right Angled Trigonometry				
4	Cumulative Frequency				

Home Study Focus

Home Study
Completed



Higher Interleaving Quiz



Branch 12 Quiz 1

1) Express 504 as a product of prime factors in index form.

(3 marks)

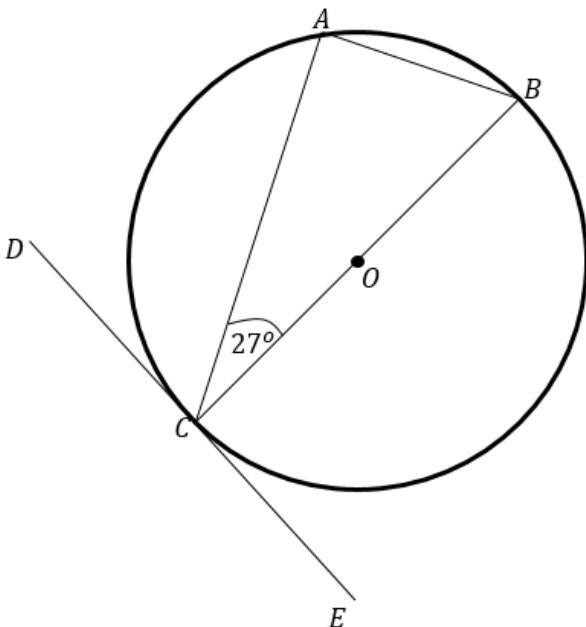
2) a) Factorise Fully $18x^2y + 12y^2$ (2 marks)

Answer: _____

b) Solve $x^2 + 2x - 35 = 0$ (3 marks)

Answer: _____

3)



3) Find the size of angle DCA. Give a reason for your answer.

(3 marks)

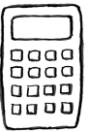
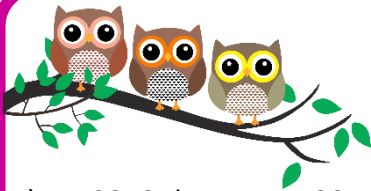
Answer: _____

4) There are 8 biscuits in a tin. 5 digestives and 3 ginger nuts. Mrs D picks out and eats two biscuits at random from the tin. Calculate the probability of selecting two different biscuits. (4 marks)

Answer: _____

Q	Topic	Σ	R	A	G
1	Product of Prime Factors				
2	Factorise and Solve				
3	Circle Theorems				
4	Probability Tree				

Higher Interleaving Quiz



Branch 12 Quiz 2

- 1) In 2010 there were 20 million computer tablets shipped around the world.
In 2017 there were 163 million computer tablets shipped around the world.
Calculate the percentage increase. **(3 marks)**

Answer: _____

- 2) Mrs Quinn buys 30 bags of flour for food tech.
There are x bags that weigh 1.5kg each.
There are y bags that weigh 2kg each.
a) Write down an equation connecting x and y .

(1 mark)

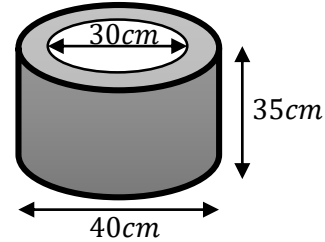
Answer: _____

- b) The total weight of the bags is 54kg
Use algebra to work out the values of x and y .
You must show your working out. **(3 marks)**

$x =$ _____ $y =$ _____

- 3) A iron tube needs to be painted with rust protection. Calculate the surface area of the tube which needs to be painted.

(5 marks)



Answer: _____

- 4) There are 300 runners in the Edinburgh marathon. **(3 marks)**

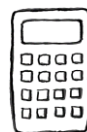
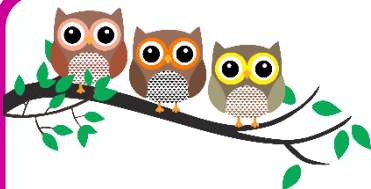
Time (t) in mins	Frequency
$180 < t \leq 200$	20
$200 < t \leq 260$	100
$260 < t \leq 300$	180
$t > 300$	0

Estimate the mean time

Answer: _____

Q	Topic	Σ	R	A	G
1	Percentage Problem				
2	Simultaneous Equations				
3	Surface Area Problem				
4	Averages from a Table				

Higher Interleaving Quiz



Branch 12 Quiz 3

- 1) Adam, Jake and Sally share sweets in the ratio of 3: 5: 7

Adam has 105 less sweets than Sally.

How many sweets does Jake have?

(3 marks)

Answer: _____

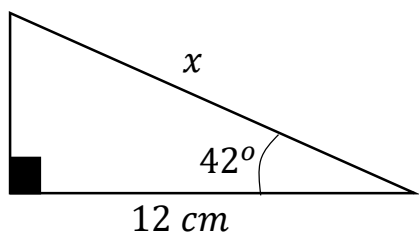
- 2) Expand and Simplify

$$(x + 1)(x + 2)^2$$

(4 marks)

- 3) Work out the length of x

(2 marks)

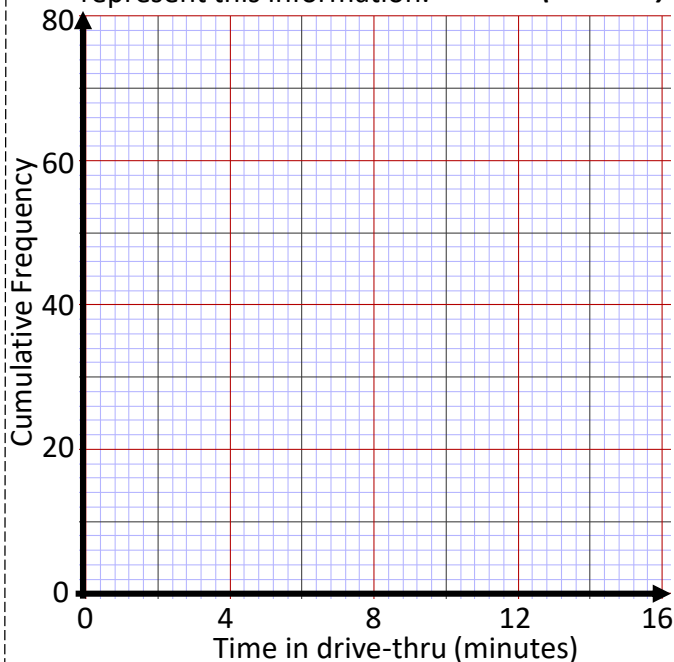


Answer: _____

- 4 The times that 60 customers waited in a drive-thru are given in the frequency table.

Time (t) in mins	Frequency		
$0 < t \leq 2$	3		
$2 < t \leq 4$	12		
$4 < t \leq 6$	25		
$6 < t \leq 10$	14		
$10 < t \leq 16$	6		

- a) Draw a cumulative frequency graph to represent this information. **(3 marks)**



- b) Use your graph to find an estimate for the interquartile range. **(3 marks)**

Answer: _____

Q	Topic	Σ	R	A	G
1	Ratio Problem				
2	Expand and Simplify				
3	Right Angled Trigonometry				
4	Cumulative Frequency				