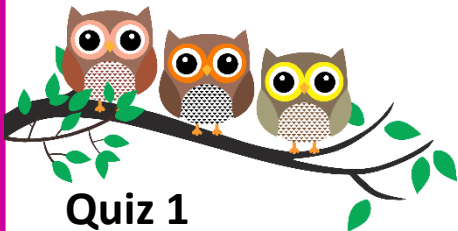


# Higher Interleaving Quiz

## Branch 9

### Quizzes 1 to 3



#### Quiz 1

Q	Topic	$\Sigma$	R	A	G
1	Ratio Problem				
2	Inequalities				
3	Similar Shapes				
4	Probability Tree				

#### Home Study Focus

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Home Study  
Completed

#### Quiz 2

Q	Topic	$\Sigma$	R	A	G
1	Compound Interest				
2	Simultaneous Equations				
3	Area Problem				
4	Averages from a Table				

#### Home Study Focus

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Home Study  
Completed

#### Quiz 3

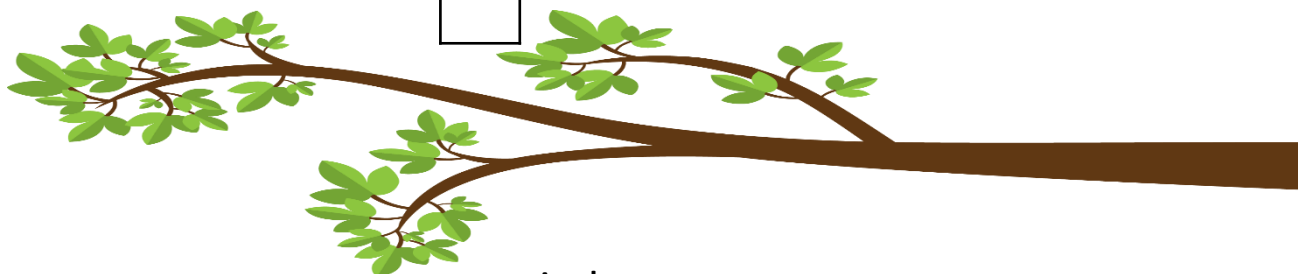
Q	Topic	$\Sigma$	R	A	G
1	Calculators Skills				
2	Algebraic Fractions				
3	Sectors				
4	Frequency Tree				

#### Home Study Focus

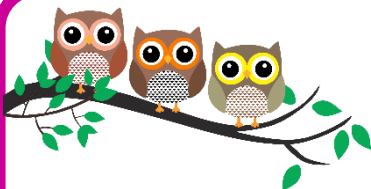
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Home Study  
Completed

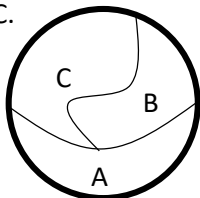


# Higher Interleaving Quiz



## Branch 9 Quiz 1

- 1) The diagram shows a circle split into three regions: A, B and C.



The ratio of the areas of the regions is 2: 3: 5.  
The radius of the circle is 10cm.  
Calculate the area of region A. **(4 marks)**

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Answer: \_\_\_\_\_

- 2) Solve  $8 - \frac{1}{2}x \geq 5$  **(2 marks)**

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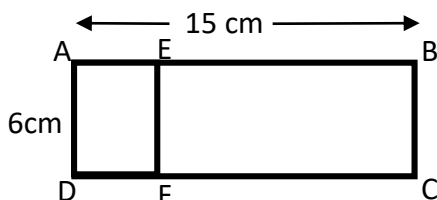


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Answer: \_\_\_\_\_

- 3) Rectangles ABCD is mathematically similar to rectangle DAEF.

$AB = 15\text{ cm}$  and  $AD = 6\text{ cm}$



Work out the area of rectangle DAEF. **(3 marks)**

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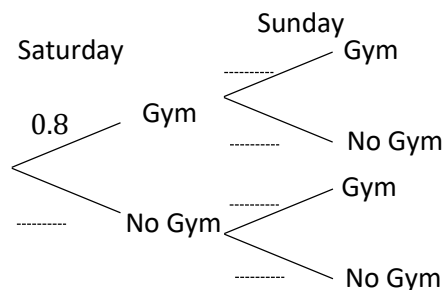
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Answer: \_\_\_\_\_

- 4) The probability that Ollie goes to the gym on a Saturday is 0.8  
The probability that Ollie goes to the gym on a Sunday is 0.4



- a) Complete the probability Tree **(2 marks)**

- b) Calculate the probability Ollie goes to the gym on a Saturday and a Sunday. **(1 mark)**

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Answer: \_\_\_\_\_

- c) Calculate the probability Ollie goes to the gym on exactly one of these days. **(3 marks)**

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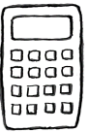
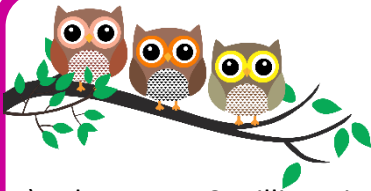


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Answer: \_\_\_\_\_

Q	Topic	$\Sigma$	R	A	G
1	Ratio Problem				
2	Inequalities				
3	Similar Shapes				
4	Probability Tree				

# Higher Interleaving Quiz



## Branch 9 Quiz 2

- 1) There are 18 million pigeons in the UK when a histoplasmosis outbreak began. The population of pigeons decreases by 0.8% monthly during the outbreak for 5 months. How many pigeons are there now. **(2 marks)**

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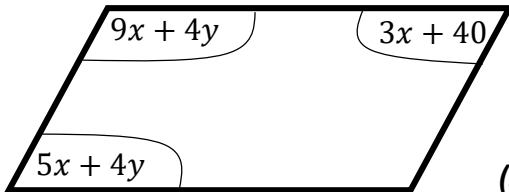
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Answer: \_\_\_\_\_

- 2) Below is a parallelogram. Find the values for  $x$  and  $y$  using an algebraic method.



**(5 marks)**

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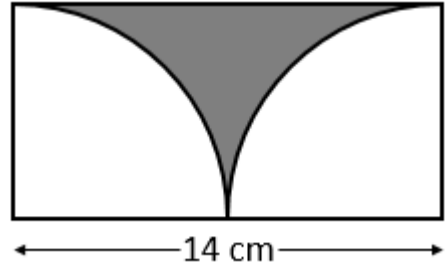
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$x =$  \_\_\_\_\_  $y =$  \_\_\_\_\_

- 3) Two identical quarter circles are cut from a rectangle as shown.



Work out the shaded area. **(5 marks)**

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Answer: \_\_\_\_\_

- 4) There are 300 pigeons in a race. Estimate the mean **(3 marks)**

Time ( $t$ ) in mins	Frequency
$60 < t \leq 120$	80
$120 < t \leq 180$	120
$180 < t \leq 540$	100
$t > 540$	0

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Q	Topic	$\Sigma$	R	A	G
1	Compound Interest				
2	Simultaneous Equations				
3	Area Problem				
4	Averages from a Table				

