# Higher Interleaving Quiz 

 Branch 9Quizzes 1 to 3


Home Study Focus

| Q | Topic | $\sum$ | R | A | G |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 1 | Ratio Problem |  |  |  |  |
| 2 | Inequalities |  |  |  |  |
| 3 | Similar Shapes |  |  |  |  |
| 4 | Probability Tree |  |  |  |  |

Home Study Completed

Quiz 2

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

Quiz 3

| Q | Topic | ( | R | A | G |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | Calculators Skills |  |  |  |  |
| 2 | Algebraic Fractions |  |  |  |  |
| 3 | Sectors |  |  |  |  |
| 4 | Frequency Tree |  |  |  |  |

Home Study Completed
Home Study Completed

Home Study Focus
$\qquad$
$\square$

Home Study Focus
$\qquad$
$\qquad$
$\square$

## Branch 9 Quiz 1

1) The diagram shows a circle split into three regions: $\mathrm{A}, \mathrm{B}$ and C .


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

## Answer:

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

## Answer:

$\qquad$
3) Rectangles $A B C D$ is mathematically similar to rectangle DAEF.


Work out the area of rectangle DAEF.
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)

Answer:
c) Calculate the probability Ollie goes to the gym on exactly one of these days.
(3 marks)
$\qquad$
$\qquad$
Answer:

| Q | Topic | $\sum$ | $R$ | $A$ | $G$ |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 1 | Ratio Problem |  |  |  |  |
| 2 | Inequalities |  |  |  |  |
| 3 | Similar Shapes |  |  |  |  |
| 4 | Probability Tree |  |  |  |  |
| WWW.missbsresOurces.com |  |  |  |  |  |

$\qquad$

## 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）
$\qquad$
$\qquad$
$\qquad$
Answer：

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

（5 marks）

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


Work out the shaded area．
（5 marks）
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
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 |


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

## Branch 9 Quiz 3

3）Charlie the carpenter cuts a hole out of a box to enable his racing pigeons to get inside．
What is the radius of the sides of the hole，if he needs the arc length to be 18.5 cm ．
（4 marks）

$\qquad$

Answer：
4）A time trail for pigeons taking place．
70 pigeons were in the race．
32 pigeons were female．
Females passed and failed in the ratio of 5：3
34 pigeons passed in total．
（3 marks）
a）Complete the frequency tree．

b）Holly states that a higher proportion of males passed the test to females．Is she correct？
Give reason for your answer．
（2 marks）

$$
2
$$

| Q | Topic | $\sum$ | R | A | G |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | Calculator Skills |  |  |  |  |
| 2 | Algebraic Fractions |  |  |  |  |
| 3 | Sectors |  |  |  |  |
| 4 | Frequency Tree |  |  |  |  |

