# Foundation Interleaving Quiz 

 Branch 15Quizzes 1 to 3


Home Study Focus

| Q | Topic | $\sum$ | R | A | G |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | Four rules of fractions |  |  |  |  |
| 2 | Factorise and Solve |  |  |  |  |
| 3 | Right-Angled Trigonometry |  |  |  |  |
| 4 | Charts and Averages |  |  |  |  |

> Home Study Completed

## Quiz 2

Home Study Focus

| Q | Topic | $\sum$ | R | A | G |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | Ratio Problem |  |  |  |  |
| 2 | Sequence |  |  |  |  |
| 3 | Angle Problems |  |  |  |  |
| 4 | Venn Diagrams \& Probability |  |  |  |  |

Home Study Completed $\square$

Quiz 3

| Q | Topic | $\sum$ | R | A | G |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 1 | Standard Form |  |  |  |  |
| 2 | Function Machines |  |  |  |  |
| 3 | Pythagoras |  |  |  |  |
| 4 | Frequency Tree |  |  |  |  |

Home Study Focus

Home Study Completed

1) $2 \frac{3}{5}+1 \frac{1}{4}$
(3 marks)

## Answer:

2) Factorise and Solve

$$
x^{2}+2 x-15=0
$$

(3 marks)
$\qquad$
$\qquad$
$\qquad$
$\qquad$
Answer:
3) What is the value of $\sin (30)$ ? (1 mark) Answer:
b) Find the length of $B C$.

4) The diagram shows information about the number of goals Team A scored during matches in the season.

Team A

a) What is the mode amount of goals? (1 marks) Answer:
b) A match is chosen at random from Team A's season. Work out the probability that the goals scored was the median amount for the team.
(3 marks)

Answer:
Team B

c) Show that Team B's scores are more consistent than Team A's
(2 marks)
$\qquad$
$\qquad$

|  |  |  |  |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: |
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| 1 | Four rules of fractions |  |  |  |  |
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## Branch 15 Quiz 2

1) The angles in a triangle are in the ratio $3: 4: 5$. Connor says "This is a right-angled triangle." Is Connor correct? Show your reasoning. (3 marks)
2) a) Which sequence is a geometric progression?
(1 mark)
Circle your answer
$1,1,2,3,5, \ldots$
$1,4,7,10,13, \ldots$
$1,8,27,64,125, \ldots$
$1,2,4,8,16, \ldots$
b) Calculate the nth term rule of this sequence
(2 marks)
10, $3, \quad-4, \quad-11$,
$\qquad$
$\qquad$

Answer:
3) Below is part of a regular shape. How many sides does it have? (3 marks)

$\qquad$
4) 50 students were asked in a survey whether they write or type essays.
$\xi=50$ students
$W=$ Write
$T=$ Type


12 students said they write.
38 students said they type.
8 students said they don't do either.
a) Complete the Venn Diagram
(3 marks)
b) One of the students is chosen at random.

$$
P(W \cap T)
$$

(1 marks)

Answer:
c) What percentage of students in the survey use type?
(2 marks)

Answer:

| Q | Topic | $\sum$ | R | A | G |
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1) Find, in standard form, the value of $\left(4.2 \times 10^{-2}\right) \times\left(3 \times 10^{5}\right)$
2) 80 people drive buses.

24 people were female.
Females drivers have had no accidents to accidents in the ratio of $7: 1$
15 people have had accidents in total.
(3 marks)
a) Complete the frequency tree.

b) Saman states that a higher proportion of males have accidents than females.
Is she correct?
Give reason for your answer.

## Answer:

3) $A B C D$ is a rectangle.

a) Tom calculates the length $A C$ but gets it wrong.

$$
\begin{aligned}
A C & =\sqrt{10+7.5} \\
A C & =\sqrt{17.5} \\
A C & =4.18 \mathrm{~cm}
\end{aligned}
$$

Explain what Tom has done wrong
b) Calculate the length of AC.

