# Foundation Interleaving Quiz Branch 8 

Quizzes 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 | Volume and Mass |  |  |  |  |
| 4 | Frequency Tree |  |  |  |  |

Home Study Focus

Home Study Completed

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

## Answer:

2) Factorise and Solve

$$
x^{2}-3 x-18=0
$$

(3 marks)
$\qquad$
$\qquad$
$\qquad$
$\qquad$
Answer:
3) Find the length of $B C$.
(3 marks)


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

| Q | Topic | $\Sigma$ | R | A | G |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Four rules of fractions |  |  |  |  |
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1）The angles in a triangle are in the ratio $2: 3: 5$ ． Connor says＂This is a right－angled triangle．＂ Is Connor correct？Show your reasoning．（3 marks）
$\qquad$
$\qquad$
$\qquad$

2）a）Which sequence is a geometric progression？
（1 mark）
Circle your answer

| $2,8,18,32,50, \ldots$ | $2,8,14,20,26, \ldots$ |
| :--- | :--- |
| $2,8,32,128,512, \ldots$ | $1,1,2,3,5, \ldots$ |

b）Calculate the nth term rule of this
sequence

$$
2,8,14,20,16, \ldots
$$

（2 marks）

## Answer：

$\qquad$
3）Calculate the sum of the interior angles．


Answer： $\qquad$

4） 40 students were asked in a survey whether they gamed on Xbox or PlayStation．
$\xi=40$ students
$X=\mathrm{Xbox}$
$P=$ PlayStation


17 students said they use only Xbox．
12 students said they use only PlayStation
5 students said they use both Xbox and PlayStation．
a）Put this information on the Venn Diagram．
（1 mark）
b）Calculate the probability of selecting a person who doesn＇t use a Xbox or PlayStation．
（2 mark）
Answer：
c）One of the students is chosen at random．

$$
P(X \cup P)
$$

（2 marks）

## Answer：

d）What percentage of students in the survey use an Xbox？
（2 marks）

Answer：

| Q | Topic | $\sum$ | R | A | G |
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| 1 | Ratio Problem |  |  |  |  |
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| 4 | Venn Diagrams \＆Probability |  |  |  |  |

1) Find, in standard form, the value of $\left(5.8 \times 10^{3}\right) \times\left(2 \times 10^{2}\right)$
2) 60 people took a test.

28 people were female.
females passed and failed in the ratio of 3:4 43 people passed in total.
(3 marks)
a) Complete the frequency tree.

2) Below is a function machine

a) What is the output when the input is -2 ?
(1 mark)
Answer:
b) What is the input when the output is -2 ?
(1 mark)

## Answer:

c) What is the output when the input is $3 x$ ?
(1 mark)

## Answer:

3) a) Calculate the volume of the cone. (2 marks)

Give your answer correct to 1 d.p..


## Answer:

b) The cone has density of $0.3 \mathrm{~g} / \mathrm{cm}^{3}$. Calculate the mass of the object.

