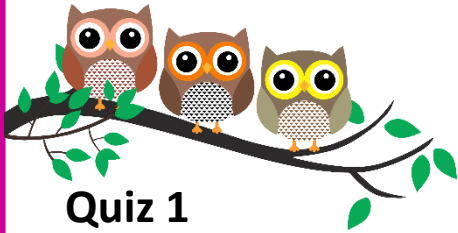


# Foundation Interleaving Quiz

## Branch 1

### Quizzes 1 to 3



#### Quiz 1

Q	Topic	$\Sigma$	R	A	G
1	Product of Prime Factors				
2	Factorise				
3	Area Problem				
4	Venn Diagram				

#### Home Study Focus

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Home Study  
Completed

#### Quiz 2

Q	Topic	$\Sigma$	R	A	G
1	Standard Form				
2	Expand and simplify				
3	Right Angled Trigonometry				
4	Charts and Averages				

#### Home Study Focus

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Home Study  
Completed

#### Quiz 3

Q	Topic	$\Sigma$	R	A	G
1	Ratio Problem				
2	Function Machines				
3	Volume and Mass				
4	Mean from a Table				

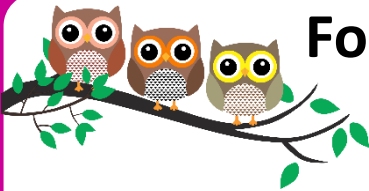
#### Home Study Focus

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Home Study  
Completed





# Foundation Interleaving Quiz



## Branch 1 Quiz 1

1) Express 126 as a product of its prime factors in index form. **(3 marks)**

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

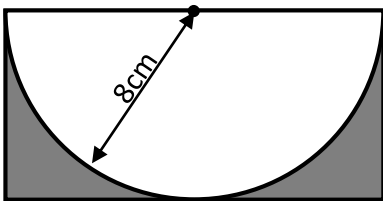
2) a) Factorise  $8x^2 - 12xy$  **(1 mark)**

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

b) Factorise  $x^2 + 5x + 6$  **(1 mark)**

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

3) The radius of the semi circle is  $8\text{cm}$ . Calculate the area of the shaded section. Leave your answer in terms of pi. **(4 marks)**




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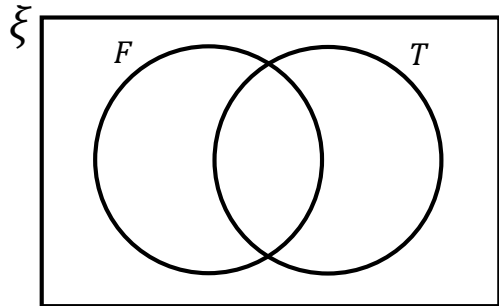
Answer: \_\_\_\_\_

4) 40 students were asked in a survey whether they used Facebook or Twitter.

$\xi = 40$  students

$F =$  Facebook

$T =$  Twitter



14 students said they use only Facebook.  
8 students said they use only Twitter  
12 students said they use both Facebook and Twitter.

a) Put this information on the Venn Diagram. **(1 mark)**

b) How many students in the survey do not use Facebook or Twitter. **(1 mark)**

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

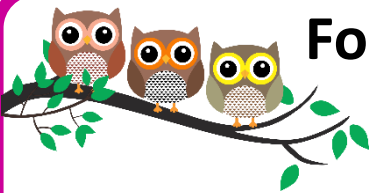
c) One of the students is chosen at random. What is the probability that this student uses Twitter? **(2 marks)**

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

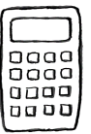
d) What percentage of students in the survey use Facebook? **(2 marks)**

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

Q	Topic	$\Sigma$	R	A	G
1	Product of Prime Factors				
2	Factorise				
3	Area Problem				
4	Venn Diagram				



# Foundation Interleaving Quiz



## Branch 1 Quiz 2

1) A teacher asks Faheem and Ella to convert 20 257 into standard form.

a) Faheem writes  $20.257 \times 10^3$  (1 mark)  
 Criticise Faheem's answer.

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b) Ella writes  $2.0257 \times 10^{-4}$   
 Criticise Ella's answer. (1 mark)

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2) Expand and simplify (3 marks)  
 $4(x - 1) - 2x(x - 5)$

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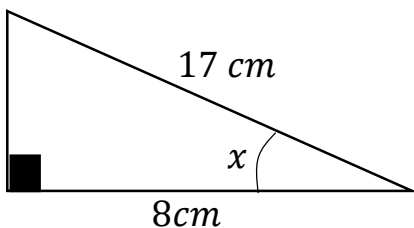
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Answer: \_\_\_\_\_

3) Work out the size of angle  $x$  (2 marks)




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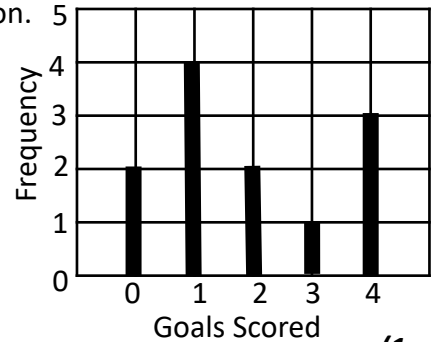


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Answer: \_\_\_\_\_

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

Team A



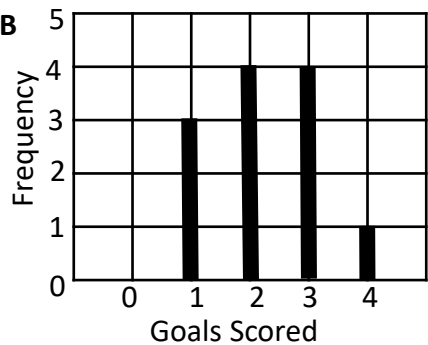
a) What is the mode score? (1 marks)

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

b) A match is chosen at random from Team A's season. Work out the probability that the goals scored was the mode amount for the team. (2 marks)

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

Team B



c) Show that Team B's scores are more consistent than Team A's (3 marks)

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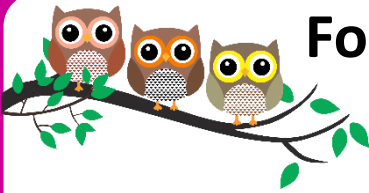


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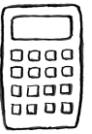
d) Calculate the median number of goals Team B scored. (2 marks)

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

Q	Topic	$\Sigma$	R	A	G
1	Standard Form				
2	Expand and simplify				
3	Right Angled Trigonometry				
4	Charts and Averages				

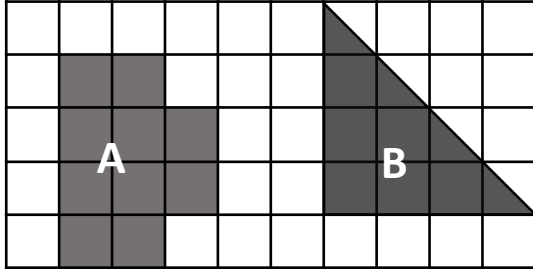


# Foundation Interleaving Quiz



## Branch 1 Quiz 3

- 1) Work out the area of shape A : area of shape B.  
Give your answer in it's simplest form. **(3 marks)**




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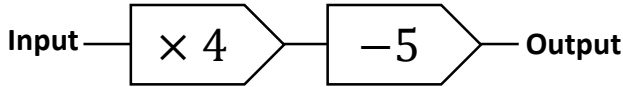
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Answer: \_\_\_\_\_

- 2) Below is a function machine



- a) What is the output when the input is  $-3$ ? **(1 marks)**

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

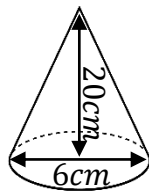
- b) What is the input when the output is  $-3$ ? **(1 marks)**

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

- 3) **(3 marks)**

- a) Calculate the volume of the cone.  
Give your answer correct to 1 d.p..

$$\text{Volume of cone} = \frac{1}{3} \pi r^2 h$$




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

- b) The cone has density of  $0.2\text{g/cm}^3$ . **(2 marks)**  
Calculate the mass of the object.

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

- 4) This frequency table gives information about the scores of 70 students on a science test.

Score ( $S$ )	Frequency		
$0 < S \leq 30$	8		
$30 < S \leq 40$	15		
$40 < S \leq 60$	27		
$60 < S \leq 70$	16		
$70 < S \leq 80$	4		

- a) Calculate an estimate for the mean score. **(3 marks)**

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

- b) Calculate the proportion of the class which scores more than 50% on the test. **(2 marks)**

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

Q	Topic	$\Sigma$	R	A	G
1	Ratio Problem				
2	Function Machines				
3	Volume and Mass				
4	Mean from a Table				