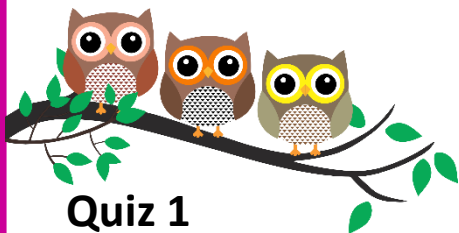


# Foundation Interleaving Quiz

## Branch 14

### 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

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

Home Study  
Completed

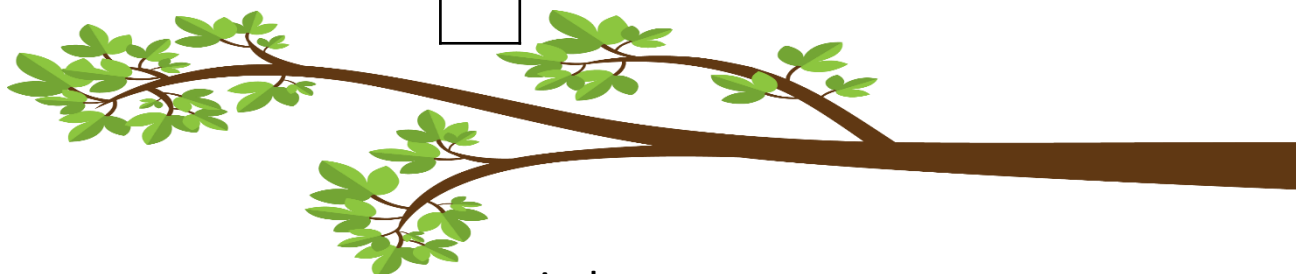
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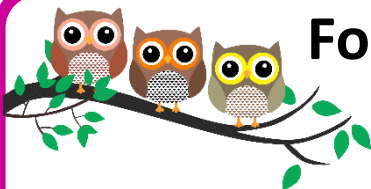
#### Quiz 3

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

#### Home Study Focus

Home Study  
Completed

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# Foundation Interleaving Quiz



## Branch 14 Quiz 1

- 1) Express 84 as a product of its prime factors in index form. **(3 marks)**

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

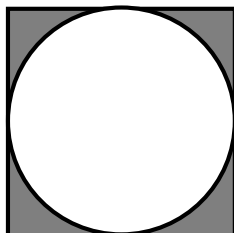
- 2) a) Factorise  $24x^2 - 8xy$  **(1 mark)**

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

- b) Factorise  $x^2 + 7x + 12$  **(1 mark)**

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

- 3) The area of the square is  $64\text{cm}^2$ .  
Calculate the area of the shaded section.  
Leave your answer in terms of pi. **(5 marks)**




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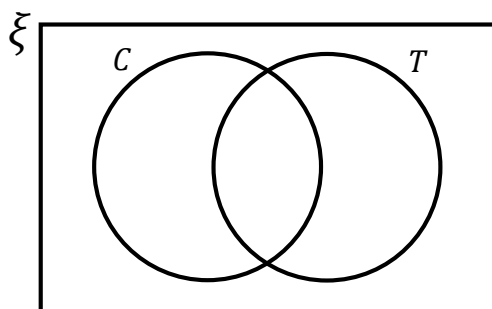
Answer: \_\_\_\_\_

- 4) 80 students were asked in a survey whether they used a computer or a tablet at home.

$\xi = 80$  students

C = Computer

T = Tablet



- 27 students said they use only Computer.  
14 students said they use only Tablet.  
29 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 either a tablet or a computer **(1 mark)**

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

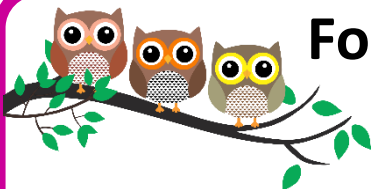
- c) One of the students is chosen at random.  
What is the probability that this student uses a tablet? **(2 marks)**

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

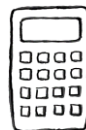
- d) What proportion of students in the survey use a computer? **(1 marks)**

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

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



# Foundation Interleaving Quiz



## Branch 14 Quiz 2

- 1) Express *three million four thousand and twenty six* in standard form. **(2 marks)**

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

- 2) Expand and simplify  $4(2x - 3) - 5(x - 7)$  **(3 marks)**

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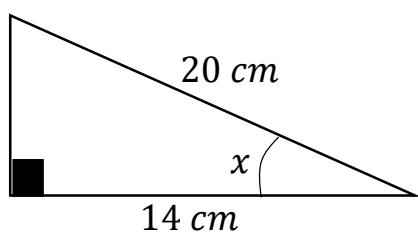
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Answer: \_\_\_\_\_

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




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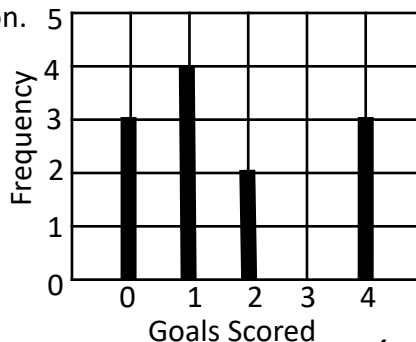


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Answer: \_\_\_\_\_

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

Team A



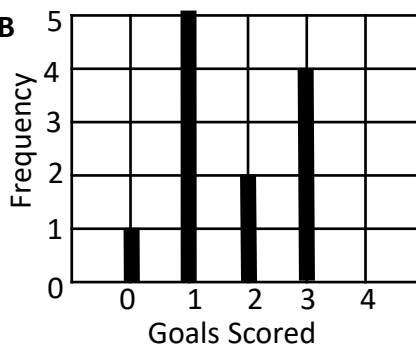
- a) What is the mode score? **(1 marks)**

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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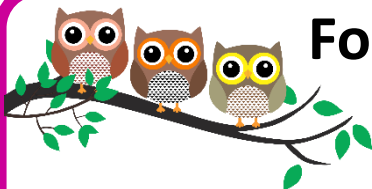


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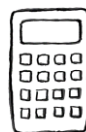
- d) Calculate the median number of goals Team B scored. **(2 marks)**

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

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

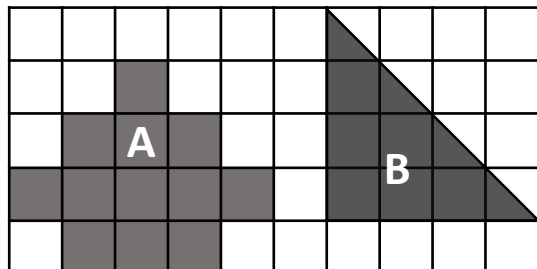


# Foundation Interleaving Quiz



## Branch 14 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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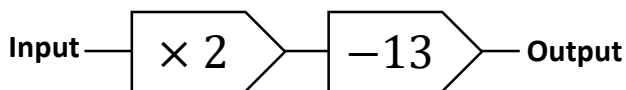
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Answer: \_\_\_\_\_

- 2) Below is a function machine



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

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

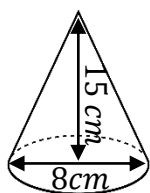
- b) What is the input when the output is  $-7$ ? **(1 marks)**

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  $1.2\text{g/cm}^3$ . **(2 marks)**  
Calculate the mass of the object.

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

- 4) This frequency table gives information about the scores of 80 students on a maths test.

Score ( $S$ )	Frequency		
$0 < S \leq 30$	8		
$30 < S \leq 40$	13		
$40 < S \leq 60$	24		
$60 < S \leq 70$	21		
$70 < S \leq 80$	14		

- 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				