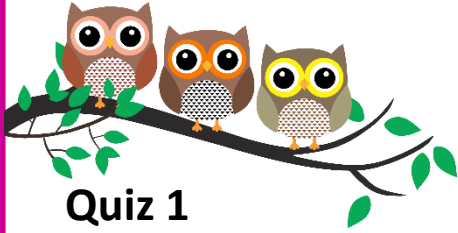


# Foundation Interleaving Quiz

## Branch 12

### Quizzes 1 to 3



#### Quiz 1

Q	Topic	$\Sigma$	R	A	G
1	Estimation				
2	Simultaneous Equations				
3	Perimeter, Area and Volume				
4	Averages				

#### Home Study Focus

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Home Study Completed

#### Quiz 2

Q	Topic	$\Sigma$	R	A	G
1	Percentage problem.				
2	Expand and Simplify				
3	Angle Problems				
4	Mean from a Table				

#### Home Study Focus

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Home Study Completed

#### Quiz 3

Q	Topic	$\Sigma$	R	A	G
1	Ratio Problem				
2	Form and Solve Equations				
3	Right Angled Trigonometry				
4	Frequency Tree				

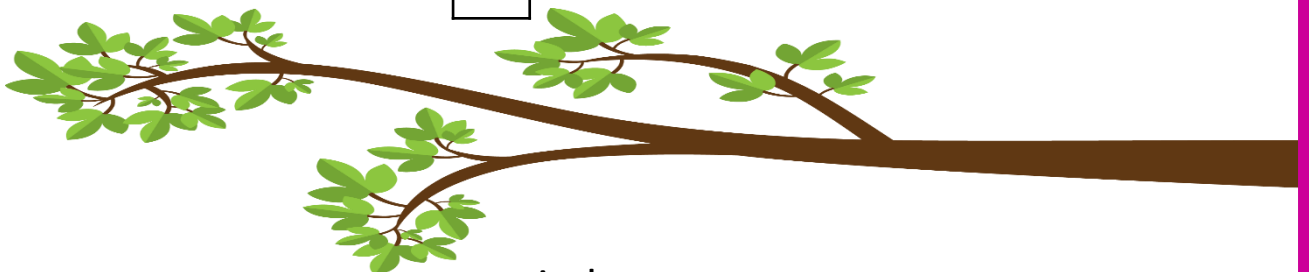
#### Home Study Focus

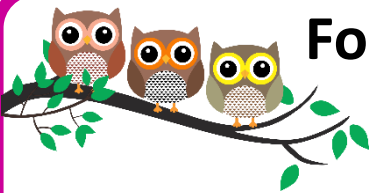
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Home Study Completed





# Foundation Interleaving Quiz



## Branch 12 Quiz 1

1) Estimate the value of

$$\frac{\sqrt{396} + 15.9}{3.246}$$

(2 marks)

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

2) Miss B buys 22 bags of sweets for her form class.

There are  $x$  bags that cost 10p each.

There are  $y$  bags that cost 8p each.

a) Write down an equation connecting  $x$  and  $y$ .  
(1 mark)

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

b) The total cost of the bags is £1.92.  
Use algebra to work out the values of  $x$  and  $y$ .  
You must show your working out. (4 marks)

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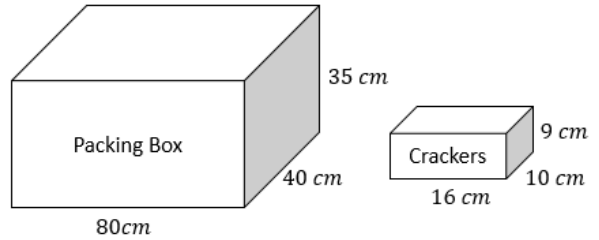
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$x =$  \_\_\_\_\_  $y =$  \_\_\_\_\_

3) George is packing boxes to be shipped to a store. How many boxes of crackers will fit inside each box?  
(3 marks)




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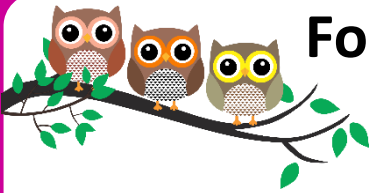
4) David has 5 cards. (5 marks)



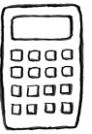
Four of the cards are faced upwards and one is facing downwards

- What would the mystery card have to be to make a mode of 5?
- What would the mystery card have to be to get a mean of 4?
- What would the mystery card have to be to have a range of 8?
- What would the mystery card have to be to have a median of 3?

Q	Topic	$\Sigma$	R	A	G
1	Estimation				
2	Simultaneous Equations				
3	Perimeter, Area and Volume				
4	Averages				



# Foundation Interleaving Quiz



## Branch 12 Quiz 2

1) Adiqa wants to invest £400 into savings for 3 years.

Which account should he put his money in?

**Account A:** Interest 3.5% for the first year and 1.5% each subsequent year.

**Account B:** Interest 2% Annually **(3 marks)**

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

2) a) Expand and simplify

$$x + 2(x - 3) \quad (1 \text{ marks})$$

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

b) Factorise Fully  $18x^2y + 12y^2$  **(2 marks)**

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

c) Factorise and solve  $x^2 + 2x - 35 = 0$  **(3 marks)**

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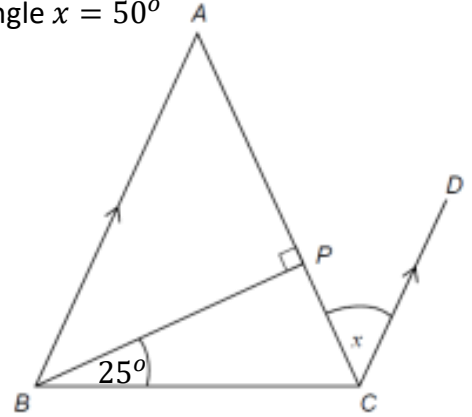
Answer: \_\_\_\_\_

3) ABC is a triangle with  $AB=AC$

BA is parallel to CD.

**(3 marks)**

Show that angle  $x = 50^\circ$




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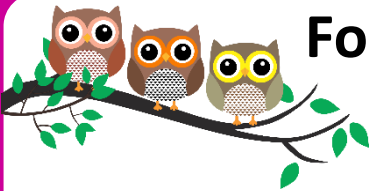
4) There are 250 runners in the borders half marathon. **(3 marks)**

Time ( $t$ ) in mins	Frequency		
$80 < t \leq 120$	60		
$120 < t \leq 140$	90		
$140 < t \leq 180$	100		
$t > 180$	0		

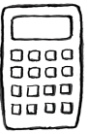
Estimate the mean time

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

Q	Topic	Answer:	$\Sigma$	R	A	G
1	Percentage problem.					
2	Expand and Simplify					
3	Angle Problems					
4	Mean from a Table					



# Foundation Interleaving Quiz



## Branch 12 Quiz 3

- 1) Adam, Jake and Sally share sweets in the ratio of 3:5:7  
Adam has 105 less sweets than Sally.  
How many sweets does Jake have? **(3 marks)**

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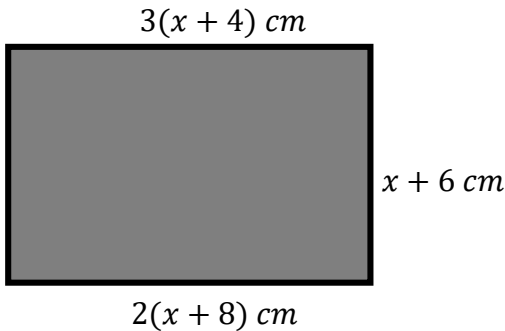


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- 2) Here is a rectangle.



- What is the perimeter? **(5 marks)**

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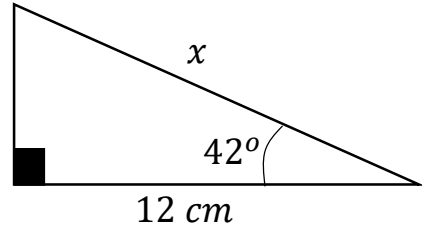
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Answer: \_\_\_\_\_

- 3) Work out the length of  $x$  **(3 marks)**




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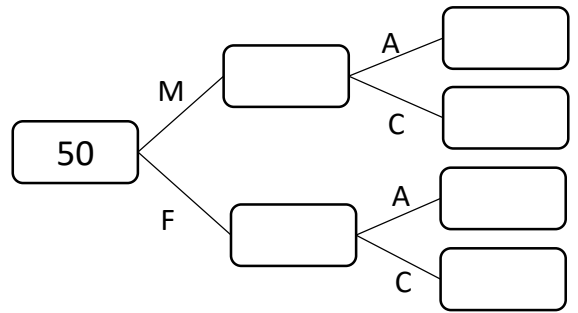
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Answer: \_\_\_\_\_

- 4) 50 passengers were on a bus.  
14 people were male.  
Male adults to children were in the ratio of 5:2  
25 adults in total.  
a) Complete the frequency tree. **(3 marks)**



- b) What proportion of the passengers were children? **(1 marks)**

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

Q	Topic	$\Sigma$	R	A	G
1	Ratio Problem				
2	Form and Solve Equations				
3	Right Angled Trigonometry				
4	Frequency Tree				