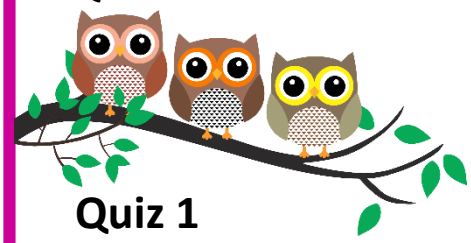
Higher Interleaving Quiz

Branch 2

Quizzes 1 to 3



Quiz 1

Q	Topic	∑	R	A	G
1	Product of Prime Factors				
2	Forming and Solving Equations				
3	Right Angled Trigonometry				
4	Mean from a Table				

Home Study Focus

Home Study Completed ☐

Quiz 2

Q	Topic	∑	R	A	G
1	Compound Interest				
2	Simultaneous Equation				
3	Area Problem				
4	Probability Tree				

Home Study Focus

Home Study Completed ☐

Quiz 3

Q	Topic	∑	R	A	G
1	Compound Interest				
2	Forming and Solving Equations				
3	Transformations				
4	Cumulative Frequency				

Home Study Focus

Home Study Completed ☐

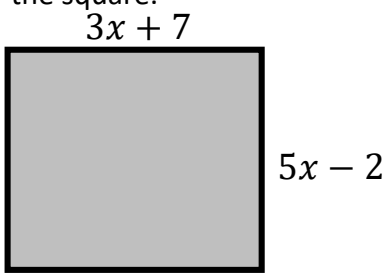
Higher Interleaving Quiz

Branch 2 Quiz 1

1) Express 140 as a product of it's prime factors in index form. ***(3 marks)***

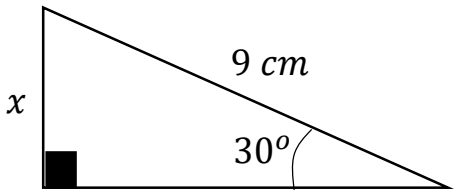
Answer: _____

2) The diagram shows a square. ***(4 marks)***
All lengths are measured in centimetres.
Use an algebraic method to find the length of one side of the square.



Answer: _____

3) Workout the length of x ***(3 marks)***



Answer: _____

4) The times that 50 customers waited in a drive-thru.

Time (t) in mins	Frequency		
$0 < t \leq 2$	3		
$2 < t \leq 4$	14		
$4 < t \leq 6$	21		
$6 < t \leq 10$	8		
$10 < t \leq 16$	4		

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

Answer: _____

b) The manager of the drive-thru says,
"80% of our customers wait less than 6 minutes."
Does the data support this statement?
You must show your working. ***(2 marks)***

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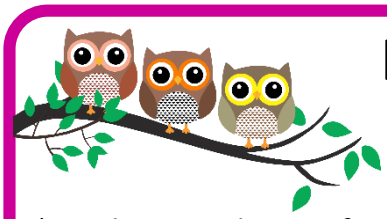


Higher Interleaving Quiz

Branch 2 Quiz 2

1) Sarah invested £8500 for 5 years.
It earned compound interest at 1.5% per annum.

a) Sarah is trying to work out the total interest earned.

$$8500 \times 1.5 \times 5$$

State what is wrong with Sarah's method. ***(2 marks)***

b) Work out the total interest earned after 5 years. ***(2 marks)***

Answer: _____

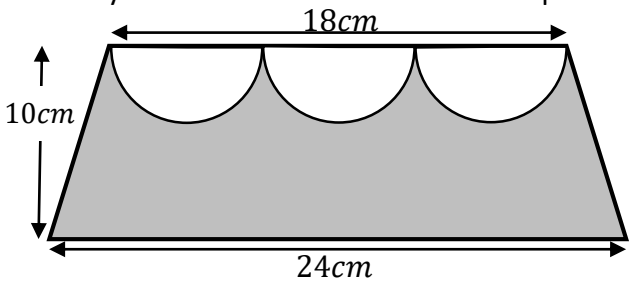
2) Solve

$$5x + 4y = 7$$
$$2x + 4y = -2$$ ***(3 marks)***

$x =$ _____

$y =$ _____

3) The diagram shows a trapezium and three identical semicircles. ***(4 marks)***
Work out the area of the shaded region.
Give your answer correct to 1 decimal place.



Answer: _____

4) The probability that Ollie goes to the gym on a Saturday is 0.8
The probability that Ollie goes to the gym on a Sunday is 0.4

a) Calculate the probability Ollie goes to the gym on a Saturday and a Sunday. ***(1 marks)***

Answer: _____

b) Calculate the probability Ollie goes to the gym on exactly one of these days. ***(3 marks)***

Answer: _____

Q	Topic	∑	R	A	G
1	Compound Interest				
2	Simultaneous Equation				
3	Area Problem				
4	Probability Tree				

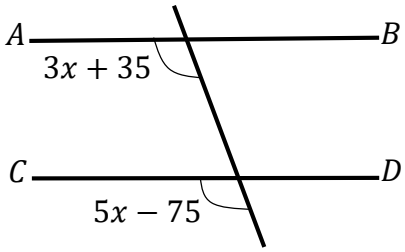
Higher Interleaving Quiz

Branch 2 Quiz 3

1) Mo invests £16,750 for 3 years at 1.4% per year compound interest. ***(3 marks)***
Work out the value of the investment at the end of 3 years.

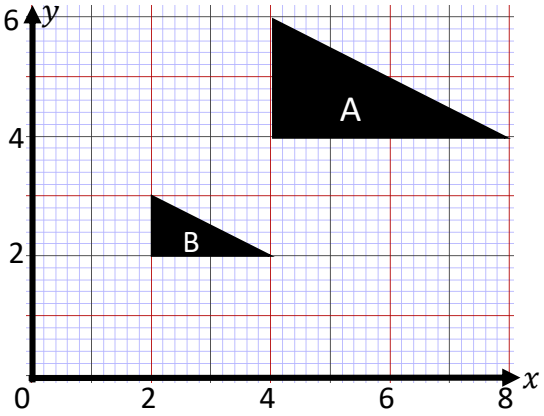
Answer: _____

2) AB and CD are parallel lines. ***(3 marks)***
Work out the value of x.



Answer: _____

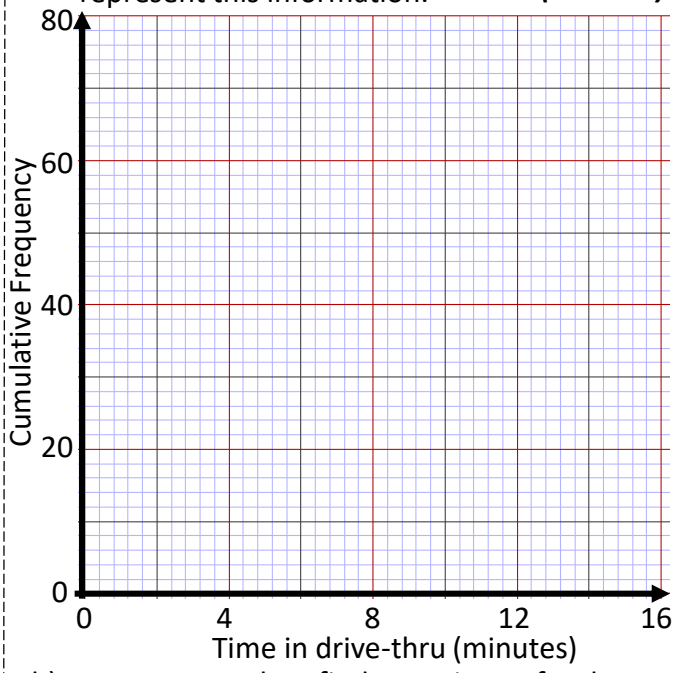
3) Describe fully the transformation of A onto B ***(3 marks)***



4 The times that 50 customers waited in a drive-thru are given in the frequency table.

Time (t) in mins	Frequency		
$0 < t \leq 2$	3		
$2 < t \leq 4$	14		
$4 < t \leq 6$	21		
$6 < t \leq 10$	8		
$10 < t \leq 16$	4		

a) Draw a cumulative frequency graph to represent this information. ***(3 marks)***



b) Use your graph to find an estimate for the interquartile range. ***(3 marks)***

Answer: _____

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