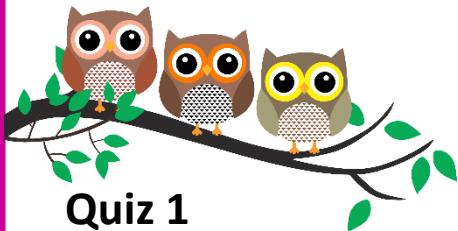


Higher Interleaving Quiz

Branch 14

Quizzes 1 to 3



Quiz 1

Q	Topic	Σ	R	A	G
1	Ratio				
2	Sequences				
3	Right angled trigonometry				
4	Box plot				

Home Study Focus

Home Study
Completed

Quiz 2

Q	Topic	Σ	R	A	G
1	Compound Interest				
2	Simultaneous Equations				
3	Trigonometry				
4	Pie Chart				

Home Study Focus

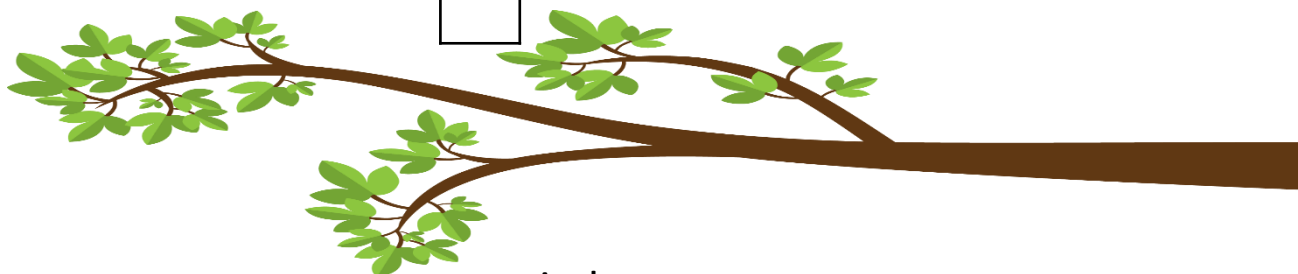
Home Study
Completed

Quiz 3

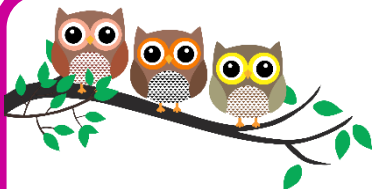
Q	Topic	Σ	R	A	G
1	Fractions				
2	Solving Quadratics				
3	Circles and Sectors				
4	Relative Frequency				

Home Study Focus

Home Study
Completed



Higher Interleaving Quiz



Branch 15 Quiz 1

1) The angles in a triangle are in the ratio 3 : 4 : 5.
Emily says "This is a right-angled triangle."
Is Connor correct? Show your reasoning.

(3 marks)

2) a) Which sequence is a geometric progression?

(1 mark)

Circle your answer

1, 1, 2, 3, 5, ... 1, 4, 7, 10, 13, ...

1, 8, 27, 64, 125, ... 1, 2, 4, 8, 16, ...

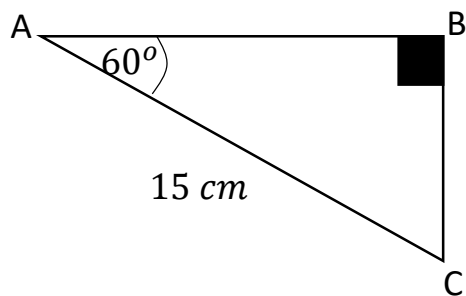
b) Calculate the n th term rule of this sequence

(2 marks)

10, 3, -4, -11, ...

Answer: _____

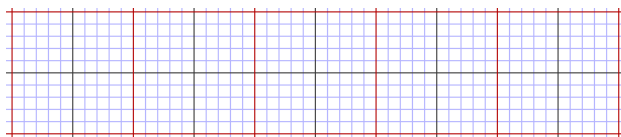
3) Find the length of AB. **(3 marks)**



Answer: _____

4) In the London Marathon 25% of the population were between 18 and 21 years old.
50% of the population were under 42 years old.
The inter-quartile range of ages was 35 years.
The oldest person was 86 years old.

a) Draw this information as a box plot. **(3 marks)**



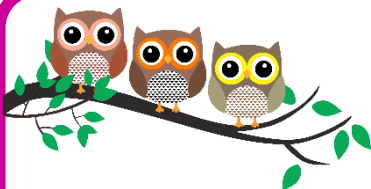
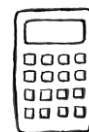
It is predicted that the age distribution of the race in 20 years time will have a;
lower quartile of 27 years,
median of 48 years,
upper quartile of 69 years.

b) Make two comments about the predicted change in the age distribution of the race.

(3 marks)

Q	Topic	Σ	R	A	G
1	Ratio				
2	Sequences				
3	Right angled trigonometry				
4	Box plot				

Higher Interleaving Quiz



Branch 15 Quiz 2

1) Finley wants to invests £5 000 for 3 years.
Which bank should he invest in? **(4 marks)**

Bank A

The account pays 1.8% interest in the first year and 0.3% compound interest from the second year annually.

Bank B

0.6% per annum compound interest.

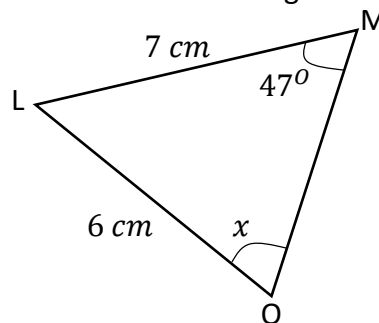
Answer: _____

2) $y = x + 2$
 $x^2 + y^2 = 34$
Find the values for x and y .

(4 marks)

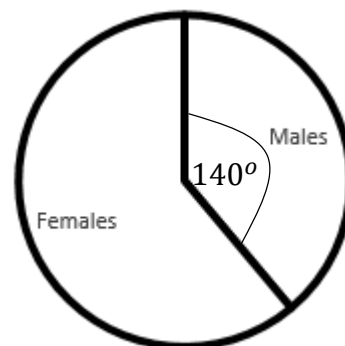
$x =$ _____ $y =$ _____
 $x =$ _____ $y =$ _____

3) Calculate the size of the angle x . **(3 marks)**



Answer: _____

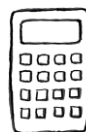
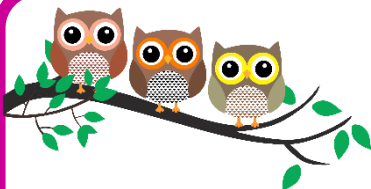
4) A school has 400 more girls than boys.
How many students are in the school in total? **(4 marks)**



Answer: _____

Q	Topic	Σ	R	A	G
1	Compound Interest				
2	Simultaneous Equations				
3	Trigonometry				
4	Pie Chart				

Higher Interleaving Quiz



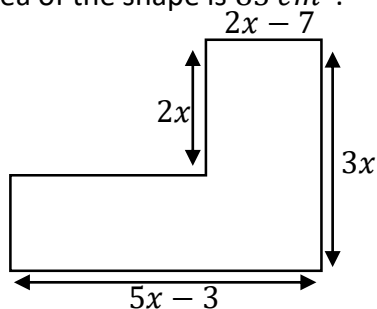
Branch 15 Quiz 3

1) $2\frac{3}{5} + 5\frac{3}{4}$

(3 marks)

Answer: _____

2) The area of the shape is 85 cm^2 .



a) Show that $9x^2 - 17x - 85 = 0$ (2 marks)

b) Solve $9x^2 - 17x - 85 = 0$ (3 marks)

Give your solutions correct to 3 s.f.

3) a) $x^2 + y^2 = 81$

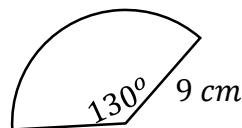
(1 mark)

What is the diameter of the circle?

Answer: _____

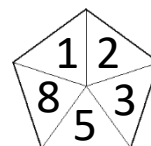
b) Calculate the area of the sector. (3 marks)

Give your answer to 3 significant figures.



Answer: _____

4) Here is a spinner.



a) Adam is going to spin the spinner 5 times. He says, "I will get one of each number."

Give a reason why he could be wrong. (1 mark)

b) Alisha spins the dice 50 times. (2 marks)

Her results are shown in the table below.

Number Spun	1	2	3	5	8
Frequency	12	8	3	10	17

Calculate the relative frequency of spinning an even number.

Answer: _____

Q	Topic	Σ	R	A	G
1	Fractions				
2	Solving Quadratics				
3	Circles and Sectors				
4	Relative Frequency				