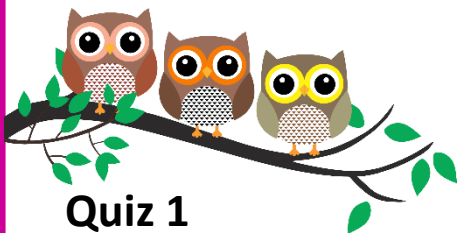


Foundation Interleaving Quiz

Branch 5

Quizzes 1 to 3



Quiz 1

| Q | Topic | Σ | R | A | G |
|---|--------------------------|----------|---|---|---|
| 1 | Estimate and Approximate | | | | |
| 2 | Expand and Simplify | | | | |
| 3 | Angle Problem | | | | |
| 4 | Venn Diagram | | | | |
| | | | | | |

Home Study Focus

Home Study Completed

Quiz 2

| Q | Topic | Σ | R | A | G |
|---|---------------------------|----------|---|---|---|
| 1 | Product of Prime Factors | | | | |
| 2 | Simultaneous Equations | | | | |
| 3 | Right Angled Trigonometry | | | | |
| 4 | Probability | | | | |
| | | | | | |

Home Study Focus

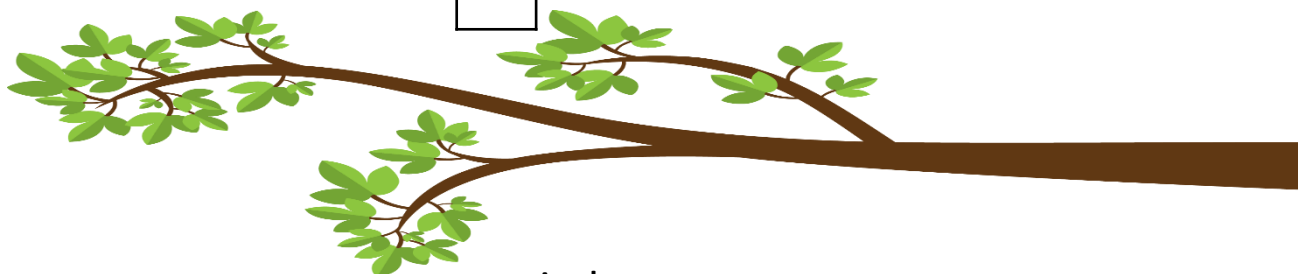
Home Study Completed

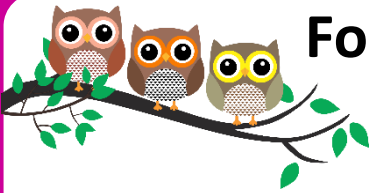
Quiz 3

| Q | Topic | Σ | R | A | G |
|---|-----------------------|----------|---|---|---|
| 1 | Standard Form | | | | |
| 2 | Sequences | | | | |
| 3 | Pythagoras' Theorem | | | | |
| 4 | Averages from a Table | | | | |
| | | | | | |

Home Study Focus

Home Study Completed





Foundation Interleaving Quiz



Branch 5 Quiz 1

1) Estimate the value of

$$\frac{2.34 \times 18.4}{0.492}$$

Answer: _____

2) a) Simplify (2 mark)

$$\frac{12p^2q^5}{4pq^3}$$

Answer: _____

b) Expand and Simplify (2 marks)

$$3(x + 1) - 2(x - 4)$$

Answer: _____

c) Expand and Simplify (2 marks)

$$(x + 3)(x - 7)$$

Answer: _____

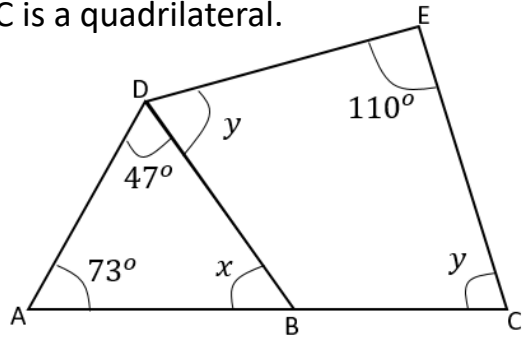
d) Solve (1mark)

$$(x - 2)(x + 5) = 0$$

Answer: _____

(2 marks)

3) ABC is a straight line. ABD is a triangle. BDEC is a quadrilateral.



a) Work out the value of x . Give a reason for your answer. (1 mark)

Answer: _____

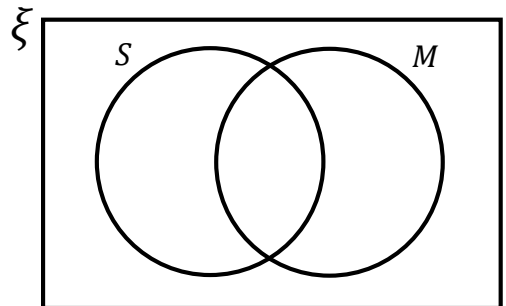
b) Work out the value of y . (2 mark)

Answer: _____

4) $\xi = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12\}$

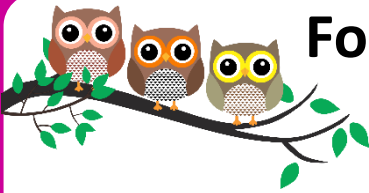
S = square numbers

M = Multiples of three

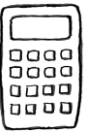


a) Complete the Venn diagram. (3 marks)

| Q | Topic | Σ | R | A | G |
|---|--------------------------|----------|---|---|---|
| 1 | Estimate and Approximate | | | | |
| 2 | Expand and Simplify | | | | |
| 3 | Angle Problem | | | | |
| 4 | Venn Diagram | | | | |



Foundation Interleaving Quiz



Branch 5 Quiz 2

1) Express 252 as a product of its prime factors in index form. **(3 marks)**

Answer: _____

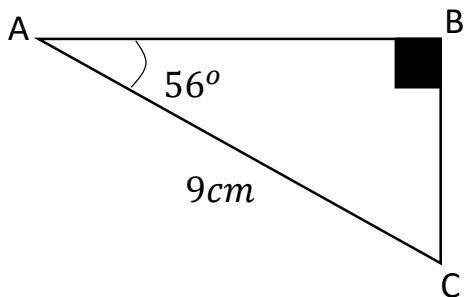
2) Solve. **(4 marks)**

$$5x + 2y = 13$$

$$x + 2y = 9$$

$x =$ _____ $y =$ _____

3) Find the length of the side AB. **(2 marks)**



Answer: _____

4) Carl is playing a game. He has two bags of counters.

One bag has four red counters, numbered 1, 3, 5 and 7.

The other bag has three purple counters, numbered 2, 4 and 6.

Carl chooses a red and purple counter at random from each bag.

He works out his score by adding the numbers on the counters together.

a) Complete the table to show all possible scores. **(2 marks)**

| | | | | |
|-----------------|---|-----------------|---|---|
| Red Counters | 7 | | | |
| | 5 | | | |
| | 3 | | | |
| | 1 | | | |
| | | 2 | 4 | 6 |
| | | Purple Counters | | |

b) Work out the probability that Carl gets

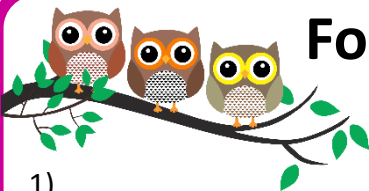
i. A score of 7 **(2 marks)**

Answer: _____

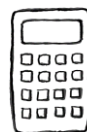
ii. A score of 8 or more **(2 marks)**

Answer: _____

| Q | Topic | Σ | R | A | G |
|---|---------------------------|----------|---|---|---|
| 1 | Product of Prime Factors | | | | |
| 2 | Simultaneous Equations | | | | |
| 3 | Right Angled Trigonometry | | | | |
| 4 | Probability | | | | |



Foundation Interleaving Quiz



Branch 5 Quiz 3

- 1)
a) Which of these has the greatest value? Circle your answer. **(2 mark)**

21.45×10^4 21 499

2.1×10^5 2.2×10^4

- b) Circle the number written in standard form. **(1 mark)**

21.4×10^4 0.2×10^{-3}

2.1×10^5 $2.2 \times 10^{0.4}$

- 2) Here are the first three terms of a sequence.

25 -14 11

Each term is obtained by adding the previous two terms together.

- a) Work out the next two terms in the sequence. **(2 marks)**

- b) The sequence continues. **(2 marks)**

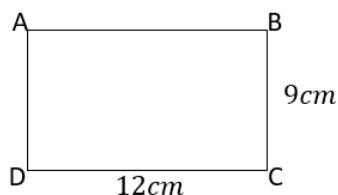
How many negative terms are in the sequence?

Circle your answer

1 2 3 4

Give a reason for your answer.

- 3) ABCD is a rectangle.



- a) Tom calculates the length AC but gets it wrong. **(1 mark)**

$$AC = \sqrt{12 + 9}$$

$$AC = \sqrt{21}$$

$$AC = 4.58 \text{ cm}$$

Explain what Tom has done wrong

- b) Calculate the length of AC. **(2 marks)**

Answer: _____

- 4) The table shows some information about the hand span of 30 adults.

| Hand Span (l , cm) | Frequency |
|-----------------------|-----------|
| $10 \leq l < 12$ | 5 |
| $12 \leq l < 14$ | 9 |
| $14 \leq l < 16$ | 11 |
| $16 \leq l < 24$ | 5 |

- a) Write down the modal class interval. **(1 mark)**

Answer: _____

- b) Calculate an estimate for the mean foot length. **(4 marks)**

Answer: _____

| Q | Topic | Σ | R | A | G |
|---|-----------------------|----------|---|---|---|
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| 4 | Averages from a Table | | | | |