WRITING AN EXPRESSION

Pearson Edexcel - Thursday 6 June 2019 - Paper 2 (Calculator) Foundation Tier

1.

7 There are y boats on a lake.
There are 7 people in each boat.

Write an expression, in terms of y, for the total number of people in the boats.

.....

(Total for Question 7 is 1 mark)

Pearson Edexcel – Specimen 2 - Paper 1 (Non-Calculator) Foundation Tier

2.

18 Dimitar has 20 sweets.
Pip also has 20 sweets.

Dimitar gives Pip x sweets.

Dimitar then eats 5 of his sweets.
Pip then eats half of her sweets.

Write expressions for the number of sweets Dimitar and Pip now have.

Dimitar ..... Pip .....

(Total for Question 18 is 3 marks)

Pearson Edexcel – Specimen 2 - Paper 3 (Calculator) Foundation Tier

3.

14 You can use this rule to work out the total cost, in pounds, of hiring a carpet cleaner.

Multiply the number of days by 7.8 and then add 12

Andy hires a carpet cleaner.
The total cost is £82.20

(a) Work out the number of days Andy hires the carpet cleaner for.

.....days

(2)

Chloe hires a carpet cleaner for y days.
The total cost is £T.

(b) Write down a formula for T in terms of y.

.....

(2)

(Total for Question 14 is 4 marks)

OCR – Tuesday 03 November 2020- Morning - Paper 1 (Calculator) Foundation Tier

4.

13 Choose a word from this list that best describes each statement.

Identity Expression Formula Term Equation

(a) $8 = n + 2$ **(a)** ..... **[1]**

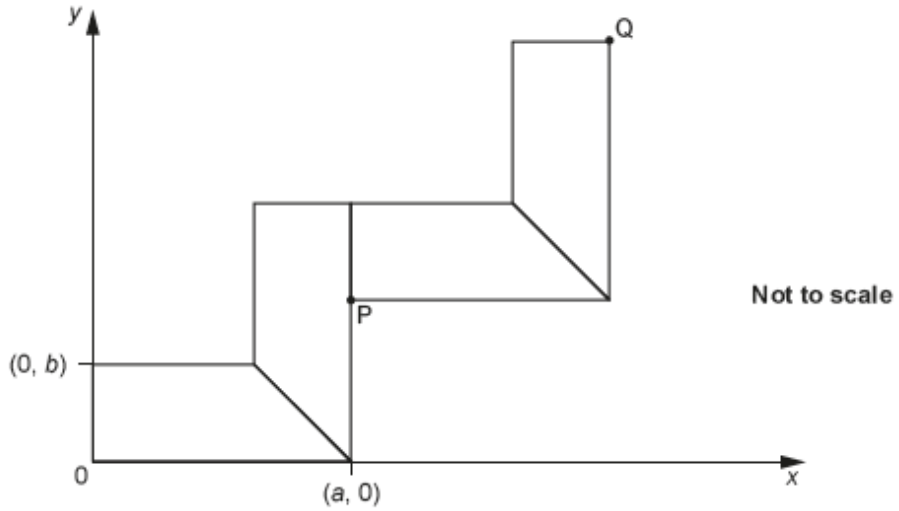
(b) $3x + 2y$ **(b)** ..... **[1]**

(c) $(a + b)(a - b) = a^2 - b^2$ **(c)** ..... **[1]**

OCR Thursday 7 June 2018 – Morning (Non Calculator) Foundation Tier

5.

16 Four identical trapeziums are placed on a coordinate grid as shown.



(a) Write down algebraic expressions for the coordinates of point P.

(a) (..... , ...) **[2]**

(b) The coordinates of point Q are (16, 13).

Work out the value of a and the value of b.

(b) a = ...

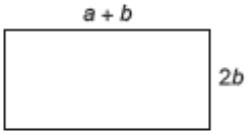
b = ... **[4]**

OCR Tuesday 12 June 2018– Morning (Calculator) Foundation Tier

6.

13 In this question, assume all dimensions are in centimetres.

Jess and Pete have many rectangular tiles.
Each tile has length $a + b$ and width $2b$.



Not to scale

(a) Jess joins three tiles together to make a larger rectangle, as shown.

Not to scale

(i) Write an expression for the perimeter of her rectangle.
Give your answer in its simplest form.

(a)(i) ..... [2]

(ii) An expression for the **area** of her rectangle is $6ab + 6b^2$.

Factorise this expression fully.

(ii) ..... [2]

(b) Pete joins some tiles together to make a different rectangle.
The area of his rectangle is $8ab + 8b^2$.

Draw a possible arrangement of tiles for Pete's rectangle.
Write down expressions for the length and for the width of the rectangle.

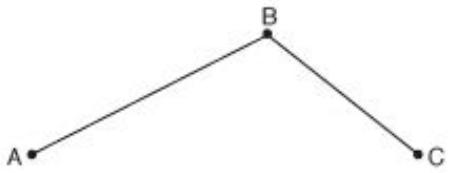
length = ...

width = ... [5]

OCR Monday 6 November 2017– Morning (Calculator) Foundation Tier

7.

14 Halina cycled from A to B at an average speed of 26 km per hour.
She then cycled from B to C at an average speed of 20 km per hour.



Not to scale

She left A at 10.00 am, did not stop at B and arrived at C at 3.00 pm.

(a) It took Halina x hours to cycle from A to B.

(i) Explain why the distance from A to B, in kilometres, is $26x$.

.....

..... **[1]**

(ii) Write down an expression, in terms of x, for the **time** taken to cycle from B to C.

(a)(ii) ..... hours **[2]**

(iii) Hence show that the **distance** from B to C, in kilometres, is $100 - 20x$.

..... **[1]**

(b) The **total distance** cycled by Halina from A to C is 118 km.

Find the distance from A to B.

(b) ..... km **[4]**

8.

23 (a) n is an integer.

(i) Explain why $2n + 1$ is an odd number.

.....

..... **[1]**

(ii) Write down an algebraic expression for the next odd number after $2n + 1$.

(a)(ii) ..... **[1]**

(b) Use algebra to show that the sum of two consecutive odd numbers will always be a multiple of 4. **[2]**

Pearson Edexcel –Sample Papers - Paper 2 (Calculator) Foundation Tier

9.

10 (a) Rob buys p packets of plain crisps and c packets of cheese crisps.

Write down an expression for the total number of packets of crisps Rob buys.

.....

(1)

(b) Solve $3x - 5 = 9$

$x =$ .....

(2)

(Total for Question 10 is 3 marks)

AQA Monday 8 June 2020 – Morning (Calculator) Foundation Tier

10.

18 Bobbi has these notes.

Note	Number of notes
£5	3
£10	x

The total value of her notes is £T

Write a formula for T in terms of x.

[2 marks]

Answer _____

AQA Thursday 7 June 2018 – Morning (Calculator) Foundation Tier

11.

7 e is 3 **more** than d.

f is 5 **less** than d.

7 (a) Write an expression for e in terms of d.

[1 mark]

Answer _____

7 (b) Write an expression for f in terms of d.

[1 mark]

Answer _____

7 (c) Work out $e - f$

Simplify your answer.

[2 marks]

_____

_____

_____

Answer _____

AQA Tuesday 12 June 2018 – Morning (Calculator) Foundation Tier

12.

18 A competition

took place in 1983

takes place every six years.

Circle the year in which it will also take place.

[1 mark]

2083 2036 2049 2023

AQA Monday 6 November 2017 – Morning (Calculator) Foundation Tier

13.

4 The value of A is double the value of B.

Circle the correct formula.

[1 mark]

$A = B + 2$ $A = 2B$ $A = \frac{B}{2}$ $A = B^2$

AQA Tuesday 13 June 2017 Morning– Morning (Calculator) Foundation Tier

14.

2 Circle the expression that is four times bigger than n.

[1 mark]

$n + 4$ $4n$ $\frac{n}{4}$ n^4