Summer 2019 Paper 2 Q15

1 Make m the subject of the formula $f = \dfrac{3m + 4}{m - 1}$

.....

(Total for Question 1 is 3 marks)

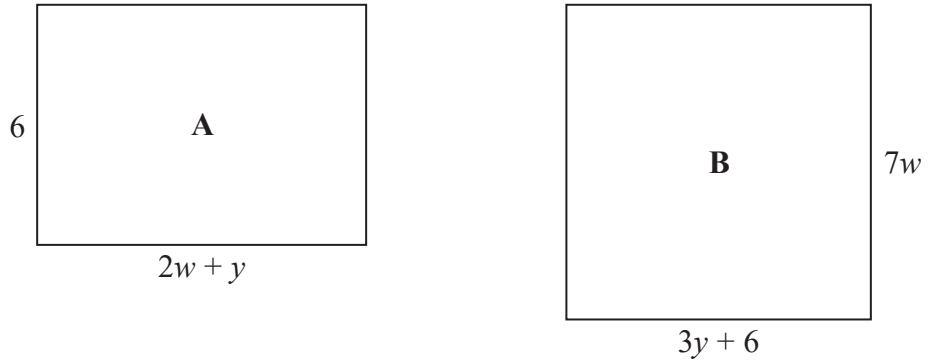
Summer 2020 Paper 1 Q17

2 Make f the subject of the formula $d = \dfrac{3(1 - f)}{f - 4}$

.....

(Total for Question 2 is 4 marks)

3 The diagram shows two rectangles, **A** and **B**.



All measurements are in centimetres.

The area of rectangle **A** is equal to the area of rectangle **B**.

Find an expression for y in terms of w.

.....

(Total for Question 3 is 4 marks)

4 $v^2 = u^2 + 2as$

$u = 12 \quad a = -3 \quad s = 18$

(a) Work out a value of v.

.....

(2)

(b) Make s the subject of $v^2 = u^2 + 2as$

.....

(2)

(Total for Question 4 is 4 marks)

Autumn 2019 Paper 1 Q12

5 $T = \frac{q}{2} + 5$

Here is Spencer's method to make q the subject of the formula.

$2 \times T = q + 5$

$q = 2T - 5$

What mistake did Spencer make in the first line of his method?

.....

.....

.....

(Total for Question 5 is 1 mark)

Autumn 2019 Paper 2 Q8

6 The number of days, d, that it will take to build a house is given by

$$d = \frac{720}{n}$$

where n is the number of workers used each day.

Ali's company will take 40 days to build the house.
Hayley's company will take 30 days to build the house.

Hayley's company will have to use more workers each day than Ali's company.

How many more?

.....

(Total for Question 6 is 3 marks)

Autumn 2019 Paper 2 Q10

7 Make k the subject of the formula $y = \sqrt{2m - k}$

.....

(Total for Question 7 is 2 marks)

Autumn 2022 Paper 3 Q1

8 Make a the subject of the formula $p = 3a - 9$

.....

(Total for Question 8 is 2 marks)

Summer 2022 Paper 3 Q2

9 $T = 4m^2 - 11$

(a) Work out the value of T when $m = -3$

$T =$ .....

(2)

(b) Make p the subject of the formula $d = 3p + 4$

.....

(2)

(Total for Question 9 is 4 marks)

Summer 2017 Paper 3 Q14

10 (a) Simplify $\dfrac{x^2 - 16}{2x^2 - 5x - 12}$

.....

(3)

(b) Make v the subject of the formula $w = \dfrac{15(t - 2v)}{v}$

.....

(3)

(Total for Question 10 is 6 marks)