

Q6.

(a) Simplify $y^4 \times y^7$

Answer -----

(1)

(b) Simplify $w^{12} \div w^4$

Answer -----

(1)

(c) Rearrange $y = 3x + 2$ to make x the subject.

Answer -----

(2)

(Total 4 marks)

Q7.

You are given that $(2x + 1)(ax + b) \equiv 6x^2 - 5x + c$

Work out the values of a , b and c .

$a = \underline{\hspace{2cm}}$ $b = \underline{\hspace{2cm}}$ $c = \underline{\hspace{2cm}}$

(Total 4 marks)

Q8.

Expand and simplify $(2x - 3y)(4x - 5y)$

Answer _____

(Total 3 marks)

Q9.

(a) Expand and simplify $(3x + 2)(2x + 5)$

Answer _____

(2)

(b) Simplify fully $(3x^2y^4)^2$

Answer _____

(2)

(Total 4 marks)

Q10.

Here is an identity $(3x + c)(x + c) \equiv 3x^2 - dx + 16$

c and d are integers. Work out all possible pairs of values of c and d .
You must show your working.

Answer _____

(Total 5 marks)

Q11.

Expand and simplify $(2x + 1)(3x + 4)$

Answer _____

(Total 3 marks)

Calculator

Q12.

Rearrange $c = \frac{4-d}{d+3}$ to make d the subject.

Answer _____

(Total 4 marks)

Q13.

Rearrange $2x = \frac{y}{w}$ to make w the subject.

Circle your answer.

$$w = \frac{2y}{x}$$

$$w = \frac{2x}{y}$$

$$w = \frac{y}{2x}$$

$$w = \frac{x}{2y}$$

(Total 1 mark)

Q14.

Rearrange $y = \frac{x}{3} + 9$ to make x the subject.

Answer _____

(Total 2 marks)

Q15.

Expand and simplify $(2x + 5y)(3x - 8y)$

Answer _____

(Total 3 marks)

Q16.

Expand and simplify $(3x + y)(2x - 5y)$

Answer _____

(Total 3 marks)

Q17.

Expand and simplify $(y + 5)(y - 4)$

Answer _____

(Total 2 marks)