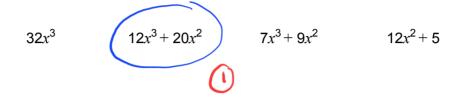
1 Expand  $4x^2(3x+5)$ 

Circle your answer.

[1 mark]



2 (2x-4)(3x+5) is expanded and simplified.

Circle the term which is part of the answer.

$$6x^{2} + 10x - 12x - 20$$
  
 $6x^{2} - 2x - 20$ 

[1 mark]

**2***x* 



**22***x* 

**−22***x* 

$$12x^3 + 7x^2 + 3x - 10 \equiv 2(ax^3 + x^2 + 2x - 5) + x(bx + c)$$

Work out the values of a, b and c.

 $20x^{3} + 2x^{2} + 4x - 10 + 6x^{2} + cx$ 

[3 marks]

$$20 = 12$$
  $2 + b = 7$   $4 + c = 3$   $c = -1$ 

## a = b = c = -1

**4** Expand and simplify fully 5(3x + 4) - 2(x - 1)

[2 marks]

(2)

Answer 132 + 22

5 Expand  $(x^2 - 9xy)(2x + 5y)$ 

[2 marks]

$$2x^{3} + 5x^{2}y - 18x^{2}y - 45xy^{2}$$

$$= 2x^{3} - 13x^{2}y - 45xy^{2}$$

Answer 
$$2x^{3} - 13x^{2}y - 45xy^{2}$$

6 Expand

Expand  $6x^2(x^3 + 2)$ 

Circle your answer.

[1 mark]

$$6x^5 + 2$$

$$6x^6 + 2$$

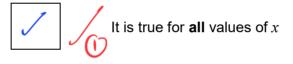
$$6x^5 + 12x^2$$

$$6x^6 + 12x^2$$

7  $3(x-1) \equiv 3x-3$  is an identity.

Tick one box.

[1 mark]



It is true for **some** values of *x* 

It is true for **no** values of x