

EXPANDING BRACKETS & SIMPLIFYING PPCAS

Expand $2(x+3)$.

$$2x + 6$$

[1]

Expand $7(x-3)$.

$$7x - 21$$

[1]

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

$$6x - 2 + 3x + 4$$

$$= 9x + 2$$

[3]

Simplify each of the following.

(i) $2(3r+1) + 5r$

$$6r + 2 + 5r = 11r + 2$$

(ii) $3(2p+3) - 2(p-1)$

$$6p + 9 - 2p + 2$$

$$= 4p + 11$$

[4]

Expand $b(b+3)$.

$$b^2 + 3b$$

[2]

(a) Expand $c(c^3-5)$.

$$c^4 - 5c$$

[1]

(b) Simplify $4(2d-3) + 3(5-7d)$.

$$8d - 12 + 15 - 21d$$

$$= -13d + 3$$

[2]

(6)