GCSE FOUNDATION · REVISION MAT 3

Expanding brackets

1 Expand

(a) $6(x - 4)$

(b) $x(x + 7)$

2 Expand and simplify

$4(x + 3) + 2(x - 5)$

3 Ina says,

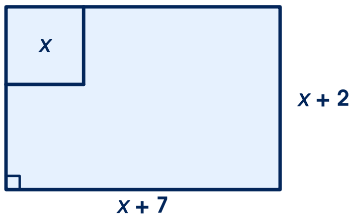
"$-5(x - 2) = -5x - 10$"

Explain the mistake Ina has made.

4 Show that

$(x + 1)(x + 6) \equiv x^2 + 7x + 6$

5 A square of side x cm is cut from a rectangle.



Show that the area left is $9x + 14$ cm^2

6 A square has side $(x + 2)$ cm.

A rectangle measures $(x + 3)$ cm by $(x + 1)$ cm.

Show that the area of the square is always 1 cm^2 more than the area of the rectangle.

1 (a) $6x - 24$

(b) $x^2 + 7x$

2 $4x + 12 + 2x - 10$

$= 6x + 2$

3 A negative times a negative is positive: $-5 \times -2 = 10$

$-5x + 10$

ANSWERS · REVISION MAT 3

Expanding brackets

4 $x^2 + 6x + 1x + 6$

$= x^2 + 7x + 6$ ✓

5 $(x + 7)(x + 2) - x^2$

$= x^2 + 9x + 14 - x^2$

$= 9x + 14$ ✓

6 Square: $x^2 + 4x + 4$

Rectangle: $x^2 + 4x + 3$

Difference = 1 cm^2 ✓