GCSE FOUNDATION · REVISION MAT 1

Expanding brackets

1 Expand

(a) $4(2x - 3)$

(b) $x(x + 5)$

2 Expand and simplify

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

3 Gil says,

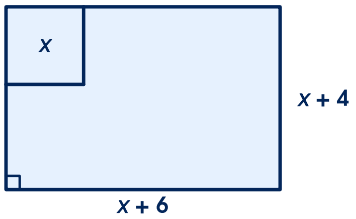
"$-2(x - 5) = -2x - 10$"

Explain the mistake Gil has made.

4 Show that

$(x + 3)(x + 4) \equiv x^2 + 7x + 12$

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



Show that the area left is $10x + 24$ cm^2

6 A square has side $(x + 3)$ cm.

A rectangle measures $(x + 5)$ cm by $(x + 1)$ cm.

Show that the area of the square is always 4 cm^2 more than the area of the rectangle.

ANSWERS · REVISION MAT 1

Expanding brackets

1 (a) **$8x - 12$**

(b) **$x^2 + 5x$**

2 $3x + 12 + 2x - 2$

$= \mathbf{5x + 10}$

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

$-2x + 10$

4 $x^2 + 4x + 3x + 12$

$= x^2 + 7x + 12$ ✓

5 $(x + 6)(x + 4) - x^2$

$= x^2 + 10x + 24 - x^2$

$= \mathbf{10x + 24}$ ✓

6 Square: $x^2 + 6x + 9$

Rectangle: $x^2 + 6x + 5$

Difference = **4** cm^2 ✓

Mr&Mrs MATHS