GCSE FOUNDATION · REVISION MAT 2

Expanding brackets

1 Expand

(a) $3(5x + 2)$

(b) $x(x - 4)$

2 Expand and simplify

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

3 Hal says,

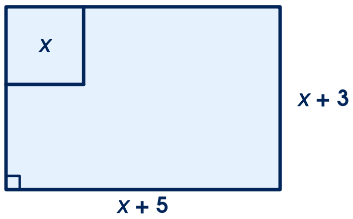
"$-3(x - 4) = -3x - 12$"

Explain the mistake Hal has made.

4 Show that

$(x + 2)(x + 5) \equiv x^2 + 7x + 10$

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



Show that the area left is $8x + 15$ cm^2

6 A square has side $(x + 4)$ cm.

A rectangle measures $(x + 6)$ cm by $(x + 2)$ cm.

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

Mr&Mrs MATHS

ANSWERS · REVISION MAT 2

Expanding brackets

1 (a) **$15x + 6$**

(b) **$x^2 - 4x$**

2 $5x - 10 + 3x + 12$

$= \mathbf{8x + 2}$

3 A negative times a negative is positive: $-3 \times -4 = 12$

$-3x + 12$

4 $x^2 + 5x + 2x + 10$

$= x^2 + 7x + 10$ ✓

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

$= x^2 + 8x + 15 - x^2$

$= \mathbf{8x + 15}$ ✓

6 Square: $x^2 + 8x + 16$

Rectangle: $x^2 + 8x + 12$

Difference = **4** cm^2 ✓