GCSE FOUNDATION · REVISION MAT 2

Factorising

1 Factorise

(a) $8x + 20$

(b) $x^2 - 5x$

2 Factorise fully $15y^2 + 10y$

3 Cleo factorises $18x + 24$ and writes $3(6x + 8)$

Explain why this is not fully factorised.

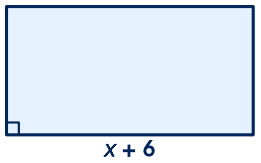
4 n is a whole number.

Show that $7n + 21$ is always a multiple of 7.

5 Factorise $x^2 + 5x + 6$

6 A rectangle has area $x^2 + 9x + 18$ cm^2.

Its length is $(x + 6)$ cm.



(a) Find an expression for the width.

(b) Find an expression for the perimeter.

ANSWERS · REVISION MAT 2

Factorising

1 (a) **$4(2x + 5)$**

(b) **$x(x - 5)$**

2 HCF = $5y$

$5y(3y + 2)$

3 $6x + 8$ still has a common factor.

The HCF of 18 and 24 is 6: **$6(3x + 4)$**

4 $7n + 21 = 7(n + 3)$

This is 7 × a whole number, so it is **a multiple of 7** ✓

5 Find two numbers that multiply to 6 and add to 5: 2 and 3

$(x + 2)(x + 3)$

6 (a) $x^2 + 9x + 18 = (x + 6)(x + 3)$, width **$x + 3$**

(b) $2(x + 6) + 2(x + 3) =$ **$4x + 18$**

Mr&Mrs MATHS