U3L2

Mass

Re-cap Find the GCF of:

1. $6x$ and $9y$
2. $12ab^2$ and $8a^2bc$
3. $15xy^3z$ and $5x^2y^2c^3$

Factoring Expressions

This is the opposite of expanding brackets

$$3x^2+15x = 3x(x+5)$$

Using algebra tiles:

Check by Expanding

eg1 $3x+6 = 3(x+2)$

eg2 $6x+9 = 3(2x+3)$

eg3 $4x^2+6x = 2x(2x+3)$

Answer the following, show the tile pattern used.

1. $5x+10$
2. $3x^2+6x$
3. $9x+6$
4. $4x^2+8x$
5. $3x^2+5x$
6. $x+x^2$
7. $3x^2+12x-6$
8. $4-6x-8x^2$
9. $-7x-7x^2-14$
10. $10x-6-12x^2$
11. $8+10x+6x^2$
12. $-9+12b+6b^2$

eg for (7) $\Rightarrow$ $4x^2+8x+12 = 4(x^2-2x+3)$

Put into equal groups

ext. p. 186 #1 $\Rightarrow$ 31