

**Factors** are multiplied together to make **products** or **multiples**. For example, in

$$2 \times 3 = 6$$

2 and 3 are factors of 6 (as are 1 and 6) and 6 is a multiple of 2 (2, 4, **6**, 8, 10...) as well as a multiple of 3 (3, **6**, 9, 12...).

Expressions can often be **factored** by performing the opposite of distribution. Begin by finding the Greatest Common Factor, and place it in front of the parentheses.

Ex.  $14x + 35$  GCF of  $14x$  and  $35$  is  $7$

$$7(2x) + 7(5) \rightarrow 7(2x + 5)$$

Ex.  $12a^2 + 16a = 4a(3a + 4)$

To check your answer, distribute!