Factorising Single Term

คิดถึงครูอ้น(C9)
084-4328462

What does the factor of a number mean?

Factors of 8:

Factors of 2x:

Factors of $2x^2$:

Factorising means :

Year 8 Factorisation

$2x^2 + 4xz$ → Factorise → $2x(x+2z)$

Year 9 Factorisation

$x^2 + 3x + 2$ → Factorise → $(x+1)(x+2)$

A Level Factorisation

$2x^3 + 3x^2 - 11x - 6$ → Factorise → $(2x+1)(x-2)(x+3)$

Factorising is the **reverse of expanding**.
When you have a sum of terms, just **identify the common factor**. i.e. Find the largest expression each of your terms is divisible by.

Common factor =

So 2x + 4 =

(You could always check this by expanding out the brackets)

Factorising is the **reverse of expanding**.
When you have a sum of terms, just **identify the common factor**. i.e. Find the largest expression each of your terms is divisible by.

Common factor =

$3x^2 + 9x$

We could have just 'factored out' the 3, but we wouldn't have fully factorised because there's also a factor of x.

So $3x^2 + 9x =$

$xy + x \quad =$

$2xy + 4x \quad =$

1) $2x - 4 =$

2) $xyz + yz =$

3) $5qr + 10r =$

4) $55p^3 + 33p^2 =$

Dealing with fractions

a $\frac{1}{2}x + \frac{1}{4}x^2 =$

b $\frac{3}{8}x + \frac{1}{4}x^3 =$

c $\frac{1}{2}xy + \frac{1}{3}x =$

d $2x^2 + \frac{1}{3}x^3 =$

1 $\frac{1}{2}x^2 + \frac{3}{2}x^3 =$

2 $\frac{1}{3}xy + \frac{1}{4}y^2 =$

3 $3xy + \frac{2}{3}x =$

a $\frac{1}{2}x + \frac{1}{3}x^2 + \frac{1}{4}x^3$

b $2xy + \frac{3}{7}x - \frac{6}{7}x^2$

c $4xy + 8x + \frac{2}{7}x^2$