factoring

writing a polynomial as a product of polynomials

Example.

2

2

2

Example.

2 $x \cdot x \cdot x$

2 $x \cdot x \cdot x$

Exercise 1.

factoring

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- The greatest common factor (GCF): largest quantity that is a factor of all the integers or polynomials involved

Example. 6, 8 and 46

$6 = 2 \cdot 3$
$8 = 2 \cdot 2 \cdot 2$
$46 = 2 \cdot 23$
$\Longrightarrow$ GCF is 2

Example. $6x^5$ and $4x^3$

$6x^5 = 2 \cdot 3 \cdot x \cdot x \cdot x$
$4x^3 = 2 \cdot 2 \cdot x \cdot x \cdot x$
$\Longrightarrow$ GCF is $2 \cdot x \cdot x \cdot x$

Exercise 1. $a^3 b^2$, $a^2 b^5$ and $a^4 b^7$
$\Longrightarrow$ GCF is $a^2 b^2$

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