

factoring

Example.

2

2

2

Example.

2

x

.

x

.

x

.

x

.

x

2

X

.

X

.

X

Exercise 1.

factoring

writing a polynomial as a product of polynomials

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

Example. 6, 8 and 46

$$6 = 2 \cdot 3$$

$$8 = 2 \cdot 2 \cdot 2$$

$$46 = 2 \cdot 23$$

$$\implies \text{GCF is } 2$$

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

$$6x^5 = 2 \cdot 3 \cdot x \cdot x \cdot x \cdot x \cdot x$$

$$4x^3 = 2 \cdot 2 \cdot x \cdot x \cdot x$$

$$\implies \text{GCF is } 2 \cdot x \cdot x \cdot x$$

Exercise 1. $a^3 b^2$, $a^2 b^5$ and $a^4 b^7$

$$\implies \text{GCF is } a^2 b^2$$

factoring

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