

Dividing Polynomials

Dividing Polynomials is similar to long division:
Let's try 131 divided by 6 !

A "Division Statement" is a summary of your results expressed as a balanced equation.

$$\text{DIVIDEND} = \text{DIVISOR} \times \text{QUOTIENT} + \text{REMAINDER}$$

Dividing Polynomials Example 1

$$2x^2 - 3x - 1 \text{ divided by } x + 2$$

Dividing Polynomials Example 2

$$x^3 - 7x + 8 \text{ divided by } x + 4$$

NOTE: the dividend and the divisor must be arranged in descending order with no terms missing (zeros as place holders)

Dividing Polynomials Example 3

$$18x - 22 + 6x^3 - 19x^2 \text{ divided by } 2x - 5$$

Dividing Polynomials Example 4

$$x^4 - 15x^3 + 2x^2 + 12x - 10 \text{ divided by } x^2 - 4$$