Dividing Polynomials

Ex 1.

Divide.

$$\frac{16x^5 - 12x^4 + 8x^2}{4x^3}$$

Ex 2.

Divide.

$$(180x^4y^{10} - 150x^3y^8 + 90xy^4 + 100y) \div 30xy^2$$

Long Division

Ex 3.

Divide.

$$\frac{5x + 4x^3 - 8 - 4x^2}{2x - 1}$$

Ex 4.

Divide.

$$\frac{x^3-1}{x-1}$$

Ex 5.

Divide $x^4 + 2x^3 + 2x^2 - x - 1$ by $x^2 + 1$.

Practice

1. Divide.

a)
$$\frac{35x^5y^4 - 49x^2y^3 + 12xy}{7x^2y}$$

b)
$$\frac{2x^3+5x+x^2+13}{2x+3}$$

c)
$$(x^3 - 8) \div (x - 2)$$

Q: A man leaves home and, after making three left turns, he ends up back at home, and finds two masked men waiting for him. What is happening?