Add, Subtract, Multiply, Divide Polynomials

Rewrite each polynomial in standard form. Then identify the leading coefficient, degree, and number of terms. Name the polynomial.

1. 4x + 2x2 – 7 + x3
2. 4x4 + 8x2 + 1 – 3x

Add or subtract the polynomials.

1. (15x2 – 3x + 11) + (2x3 – x2 + 6x + 1)
2. (3x2 – 5x) – (-4 + x2 + x)

Multiply the polynomials.

1. (5x3 + x2 – 9x)(y + 2)
2. (2x – 2)3

Divide the polynomials.

1. x4 – 3x3 – 7x – 14

 x – 4

1. x3 + 2x2 – x – 2

x + 2

1. x2 – 18x + 14

 x – 1

1. -5x – x3 – 2 + 5x2

x – 2