

Polynomials and factoring: Practice

1. distribute:

a. $4x(2x+3)$ b. $-5x^4(3x^3-2x^2+8)$ c. $6n(4n^4-n^3+9)$

2. find the GCF:

a. 24 and 36 b. 144 and 108

3. Factor out the GCF:

a. $5x^5+25x^4+30x^3$ b. $8x^4+16x^2+32x$

Polynomials + factoring: Practice

4. Multiply:

a. $(x+3)(x-2)$

b. $(x+5)(x-5)$

c. $(x-6)(x-4)$

d. $(x+7)(x+3)$

e. $(x+3)(x^2+2x+3)$

f. $(x^2-2x+5)(x^2+3x+4)$

Polynomials and factoring: Practice

5. Add the polynomials:

a. $(3x^2 - x) + (2x^2 + 2x + 5)$ b. $(-4x^2 + 3x - 2) + (2x^2 + x - 4)$

6. Subtract the polynomials

a. $(3x^2 - 2x) - (2x^2 + 3x - 2)$ b. $(3x^4 - 4x^2 + x + 2) - (4x^2 + 8)$

Polynomials and Factoring: Practice

1. Factor:

a. $12x^2 - 8x - 15$

b. $25n^2 - 20n + 4$

c. $5x^3 + 20x^2 - 5x - 15$ d. $2x^2 - 11x + 15$

e. $x^2 + 5xy + 75y^2$ f. $x^2 - 6x + 26$