

Factoring and Simplifying Polynomials

1. Simplify each of the following expressions.

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

b. $x^2(7x + 5) - (2x + 6)(x - 1)$

2. Factor each of the following polynomials. Write prime if not factorable.

a. $x^2 - 3x - 28$

b. $x^2 - x - 90$

c. $3x^2 - 10x + 8$

d. $5x^2 - 18x + 9$

e. $3x^2 - 75$

f. $9x^2 + 36$

g. $25x^2 - 10x + 1$

h. $2x^3 + 54$