

MULTIPLYING POLYNOMIALS

# SECTION 10.2

## Distributive property

1.)  $-3(x + 5)$

$$-3x - 15$$

2.)  $4x(2x - 6)$

$$8x^2 - 24x$$

3.)  $(x^2 + 5)3$

$$3x^2 + 15$$

4.)  $10x(x^2 + 4x - 5)$

$$10x^3 + 40x^2 - 50x$$

5.)  $(x + 2)(3x + 5)$

$$3x^2 + 5x + 6x + 10$$

$$3x^2 + 11x + 10$$

# FOIL

$$\begin{aligned} 1.) (x+3)(x+4) \\ x^2 + 4x + 3x + 12 \\ x^2 + 7x + 12 \end{aligned}$$

$$\begin{aligned} 2.) (x-7)(2x+4) \\ 2x^2 + 4x - 14x - 28 \\ 2x^2 - 10x - 28 \end{aligned}$$

$$\begin{aligned} 3.) (3x-4)(6x+2) \\ 18x^2 + 6x - 24x - 8 \\ 18x^2 - 18x - 8 \end{aligned}$$

$$\begin{aligned} 4.) (-5x-7)(-3x-4) \\ 15x^2 + 20x + 21x + 28 \\ 15x^2 + 41x + 28 \end{aligned}$$

## FOIL

$$5.) (-6x - 4)(2x + 4)$$

$$-12x^2 - 24x - 8x - 16$$

$$-12x^2 - 32x - 16$$

$$6.) (2x - 4)(x^2 + 8x - 3)$$

$$2x^3 + 16x^2 - 6x - 4x^2 - 32x + 12$$

$$2x^3 + 12x^2 - 38x + 12$$

# CLASSWORK

● PG 587 # 9-17

# HOMEWORK

● PG 587 # 18- 40 EVEN