

pg. 280

#33.

Feb. 6

Foil

$$= 2x^2 (x-1)(2x-1)$$

*(Note: Red arrows indicate the FOIL process: 2x^2 * x = 2x^3, 2x^2 * (-1) = -2x^2, (-1) * (2x-1) = -x + 1, and (-1) * (-1) = 1. The -2x^2 and -x terms are then combined to -3x.)*

$$= 2x^3 - 3x^2 + 1$$

$$37. (2x+3)(2x+1)$$

$$= 4x^2 + 2x + 6x + 3$$

$$= 4x^2 + 8x + 3$$

$$41. (7y-3)(2y-7)$$

$$= 14y^2 - 49y - 6y + 21$$

$$= 14y^2 - 55y + 21$$

$$44. (x-1.2)(x+3)$$

$$= x^2 + 3x - 1.2x - 3.6$$

$$= x^2 + 1.8x - 3.6$$

$$46. (x-3)(x+2.1)$$

$$x^2 + 2.1x - 3x - 6.3$$

$$x^2 - 0.9x - 6.3$$

47.

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

$$= 2(x^2 + 5x + 3x + 15)$$

$$= 2(x^2 + 8x + 15)$$

$$= 2x^2 + 16x + 30$$

49. $-1(a+3)(a-2)$

$$-1(a^2 - 2a + 3a - 6)$$

$$= -1(a^2 + a - 6) = -a^2 - a + 6$$

$$\begin{aligned} 51. & 3(2x-1)(3x-2) \\ &= 3(6x^2 - 4x - 3x + 2) \\ &= 3(6x^2 - 7x + 2) \\ &= 18x^2 - 21x + 6 \end{aligned}$$

55a

$$\frac{3+4}{x+4} = ?$$



$$A = L \times w$$

$$A = 3(7)$$

$$A = 21 \text{ cm}^2$$

$$A = L \times w$$

$$A = x(x+4)$$

$$A = x^2 + 4x$$

$$A = 3^2 + 4(3)$$

$$A = 9 + 12$$

$$A = 21 \text{ cm}^2$$

$$A = 1000(1 + 0.08)^2$$

$$A = \text{\$} 1166.40$$

;

12/1/12

P283 Factoring Trinomials

5. ^h Sum
m + n

⁶ Product
mn

^{-1, -6}
m, n

a) 7
b) 8
c) 13
d) 18
e) -8
f) -10
g) -7

12
15
12
7
15
25
12

3, 4
3, 5
1, 12
7, 11
-3, -5
-5, -5
-3, -4

7. FACTOR

$$x^2 + 7x + 10$$

$$= (x+2)(x+5)$$

$$= x^2 + 5x + 2x + 10 \quad 2, 5 \quad \text{!}$$

$$= x^2 + 7x + 10$$

$$\begin{array}{l} \times (10) \\ + (7) \end{array}$$

$$8. y^2 - 8y + 15$$

$$= (y-3)(y-5)$$

$$= y^2 - 5y - 3y + 15$$

$$= y^2 - 8y + 15$$

$$\begin{array}{l} \times (15) \\ + (-8) \\ -3, -5 \end{array}$$

$$\begin{aligned}
 w^2 - \cancel{w} - 56 & \quad \times \begin{pmatrix} -56 \\ -1 \end{pmatrix} \\
 = (w+7)(w-8) & \quad + \begin{pmatrix} -1 \\ 7-8 \end{pmatrix}
 \end{aligned}$$

29.

Hw/c
finish
box 2

box 3
thru
20

$$\frac{3x^2}{3} - \frac{21x}{3} + \frac{36}{3}$$

$$= 3(x^2 - 7x + 12) \times (12) + (-7)$$

$$= 3(x-3)(x-4)$$

$$= 3(x^2 - 4x - 3x + 12) \times 12$$

$$= 3(x^2 - 7x + 12)$$

$$= 3x^2 - 21x + 36$$