

HW: 8.3/13-27 odd, 37, 39

Warm up:

Simplify.

1) $6xy(x^4 + 2xy^7)$

$$6x^5y + 12x^2y^8$$

2) $4x^2y(9x^2 - 3xy + 5y^4)$

$$36x^4y - 12x^3y^2 + 20x^2y^5$$

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

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

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

$$x^2 + 5x + 2x + 10$$

$$x^2 + 2x + 5x + 10$$

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

$$(2x + 3)(3x + 4) \quad \text{First}$$

$$6x^2 + 8x + 9x + 12$$

$$6x^2 + 17x + 12$$

Outer

$$\underline{(2x + 3)} \underline{(3x + 4)} \quad \text{Inner}$$

$$6x^2 + 8x + 9x + 12$$

$$6x^2 + 17x + 12$$

Last

$$\begin{aligned} & (-3x + 2)(5x - 1) \quad \text{FOIL} \\ & -15x^2 + \underline{3x} + \underline{10x} - 2 \\ & -15x^2 + 13x - 2 \end{aligned}$$

$$(-6x - 3)(-x + 8)$$

$$6x^2 - \underline{48x} + \underline{3x} - 24$$

$$6x^2 - 45x - 24$$

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

$$x^2 - 2x + 3x - 6$$

$$x^2 + x - 6$$

$$(x + 4)^2$$

$$(x + 4)(x + 4)$$

$$x^2 + 4x + 4x + 16$$

$$x^2 + 8x + 16$$

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

$$6x^4 - 12x^3 - 18x^2 + 8x^2 - 16x - 24$$

$$6x^4 - 12x^3 - 10x^2 - 16x - 24$$

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

$$-2x^3 + \underline{8x^2} - \underline{6x} + \underline{5x^2} - \underline{20x} + 15$$

$$-2x^3 + 13x^2 - 26x + 15$$

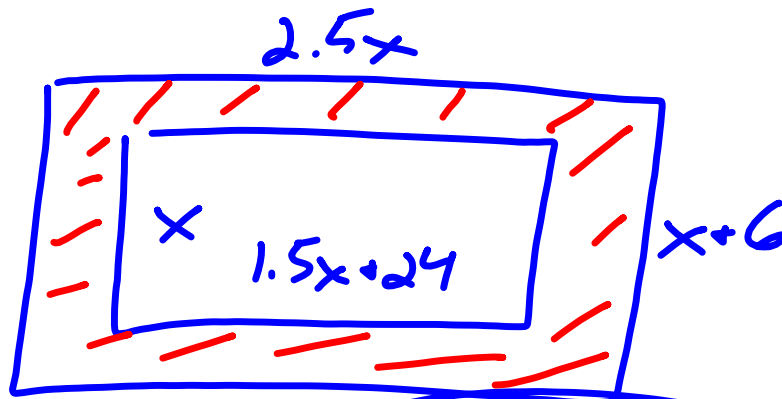
HW Solutions

$$(2) \quad -9g(-2g + g^2) + 3(g^2 + 4)$$

$$\underline{18g^2 - 9g^3} + \underline{3g^2 + 12}$$

$$\textcircled{-9g^3 + 21g^2 + 12}$$

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$$a) \quad x(1.5x+24) = 1.5x^2 + 24x$$

$$b) \quad 2.5x(x+6) - x(1.5x+24)$$

$$2.5x^2 + 15x - 1.5x^2 - 24x$$

$$x^2 - 9x$$

Q1

$$-5q^2w^3(4q+7w) + 4qw^2(q^2w+2) - 3w(3q^2w^2+9)$$

$$\underline{-20q^3w^3 - 35q^2w^4 + 28q^3w^3 + 8q^2w^2 - 9q^3w^3 - 27qw}$$

$$\underline{-29q^3w^3 - 35q^2w^4 + 28q^3w^3 + 8q^2w^2 - 27qw}$$

$$\underline{-q^3w^3 - 35q^2w^4 + 8q^2w^2 - 27qw}$$

$$\textcircled{4} 3x^p(4x^{2p+3} + 2x^{3p-2}) = 12x^{12} + 6x^{10}$$

$$12x^{\underline{3p+3}} + 6x^{\underline{4p-2}} = 12x^{\underline{12}} + 6x^{\underline{10}}$$

$$\begin{array}{r} 3p+3=12 \\ \underline{-3 \quad -3} \\ 3p=9 \\ \underline{\div 3 \quad \div 3} \\ p=3 \end{array}$$

$$4p-2=10$$

$$\textcircled{1} f(f^2 + 2f + 25)$$
$$f^3 + 2f^2 + 25f$$

$$\textcircled{2} 2j^2(5j^3 - 15j^2 + 2j + 2)$$

$$10j^5 - 30j^4 + 4j^3 + 4j^2$$

Q3

$$4n(2n^3p^2 - 3np^2 + 5n) + 4p(4n^2p - 2np^2 + 3p)$$

$$8n^4p^2 - 12n^2p^2 + 20n^2 + 24n^2p^2 - 8np^3 + 12p^2$$

$$8n^4p^2 + 12n^2p^2 + 20n^2 - 8np^3 + 12p^2$$

pg. 162-163/9-21 odd

$$\textcircled{9} \quad y^2 + 5y + 6$$

$$\textcircled{11} \quad a^2 + 3a - 4$$

$$\textcircled{13} \quad 2x^2 - 11x + 5$$

$$\textcircled{15} \quad 6z^2 + 5z - 6$$

$$\textcircled{14} \quad (3z-2)(2z+3)$$

$$6z^2 + \underline{9z} - \underline{4z} - 6$$

$$\textcircled{6z^2 + 5z - 6}$$

