

4-6 Day 2

Examples... p. 163 WE

$$(37) (x+2)(x-5) = (x-1)(x-3)$$

$$x^2 - 5x + 2x - 10 = x^2 - 3x - x + 3$$

$$\cancel{x^2} - 3x - 10 = \cancel{x^2} - 4x + 3$$

$$\cancel{x} - 10 = \cancel{x} - 3$$

$$x = 13$$

$$\checkmark (13)(8) = (12)(10)$$

$$120 = 120$$

$$(39) (2x-5)(x+4) + 2x(1-x) = 0$$

$$2x^2 - 8x - 5x + 20 + 2x - 2x^2 = 0$$

$$\cancel{2x^2} - 11x + 20 = 0$$

$$\cancel{-11x} = \frac{-20}{-11}$$

$$x = \frac{20}{11}$$

$$(41) (x-3)(x^2-2x+6) = x(x^2-5x+9)$$

$$x^3 - 2x^2 + 6x - 3x^2 + 6x - 18 = x^3 - 5x^2 + 9x$$

$$\cancel{x^3} - \cancel{2x^2} + 12x - 18 = \cancel{x^3} - \cancel{5x^2} + 9x$$

$$3x - 18 = 0$$

$$3x = 18$$

$$x = 6$$

(43) Square of x^2-3x+5

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

$$x^4 - 3x^3 + 5x^2 - 3x^3 + 9x^2 - 15x + 5x^2 - 15x + 25$$

$$x^4 - 6x^3 + 14x^2 - 30x + 25$$

45) Cube of $x+5$

$$(x+5)[(x+5)(x+5)]$$

$$(x+5)[x^2+5x+5x+25]$$

$$(x+5)[x^2+10x+25]$$

$$x^3+10x^2+25x+5x^2+50x+125$$

$$x^3+15x^2+75x+125$$

47) $(2-y)^3 = 8 - 12y + 6y^2 - y^3$

$$(2-y)^4$$

$$(2-y)(8-12y+6y^2-y^3)$$

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

$$y^4-8y^3+24y^2-32y+16$$

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37-48 all

1-15 ST

Quiz Fri
Lessons 3-6

HC

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$$(58) (x-3)(x+7) - (x+1)(x+5) = 0$$

$$\cancel{x^2 + 7x - 3x - 21} - \cancel{x^2 - 5x - x - 5} = 0$$

$$-2x - 26 = 0$$

$$\cancel{-2x} = \frac{26}{2}$$

$$x = -13$$