Algebra I Tues. 4-2-13 Class Notes

Homework Review: Pg 484 7-23 ODD

(7) $5x^2 + 11x + 2$ Standard Form ✓

Sum = b = 11

Prod = ac = 10

+1 +10

$(5x^2 + 1x) + (10x + 2)$

$x(5x+1) + 2(5x+1)$

$(5x+1)(x+2)$ ✓

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(9) $4x^2 - 9x + 5$ Std. Form ✓

Sum = b = −9 ✓

Prod = ac = 20 ✓

−4 −5

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

$4x(x-1) + -5(+x-1)$

$(x-1)(4x-5)$ ✓

(11) $5x^2 + 9x + 4$ Std Form ✓

sum = b = 9

prod = ac = 20

+4 +5

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

$x(5x+4)+1(5x+4)$

$(5x+4)(x+1)$ ✓

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(13) $4a^2 + 8a - 5$ Std Form ✓

sum = b = 8

prod = ac = −20

−2 +10

PUT + AS 3RD term IF YOU have a choice

$(4a^2-2a)+(10a-5)$

$2a(2a-1)+5(2a-1)$

$(2a-1)(2a+5)$ ✓

(15) $2x^2 + x - 6$ STD? ✓

sum = b = 1

prod = ac = −12

−3 +4

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

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

$(2x-3)(x+2)$ ✓

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(17) $10x^2 - 9x - 1$ SF ✓

sum = b = −9

prod = ac = −10

+1 −10 ← PUT THIS 2ND

$(10x^2 - 10x) + (1x - 1)$

$10x(x-1) + 1(x-1)$

$(x-1)(10x+1)$

(19) $-2x^2+5x+12$ SF ✓

sum = b = 5

prod = ac = −24 (use as 3rd term)

−3, +8

$(-2x^2-3x)+(8x+12)$

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

$\boxed{(2x+3)(-x+4)}$

or $(2x+3)(-1)(x-4)$ BOOK ANSWER

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(21) $-5x^2+7x+6$ SF ? ✓

sum = b = 7

prod = ac = −30

−3, +10

$(-5x^2-3x)+(10x+6)$

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

$\boxed{(5x+3)(-x+2)}$ or $(-1)(5x+3)(x-2)$

(23) $-4x^2 - 8x + 5$ SF = ?

Sum = b = −8

Prod = ac = −20

+2 −10

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

$-2x(2x - 1) + -5(2x - 1)$

$(2x - 1)(-2x - 5)$

or $(2x - 1)(-1)(2x + 5)$