

Algebra I

4-6

Multiplying Polynomials

First
Outside
Inside
Last

Multiply. (pg 162)

1) $\begin{array}{r} 3x - 5 \\ 2x + 1 \end{array}$

$$\begin{array}{r} (3x-5)(2x+1) \\ \underline{6x^2 + 3x - 10x - 5} \\ 6x^2 - 7x - 5 \end{array}$$

9) $(y+3)(y+2)$

$$\begin{array}{r} y^2 + 2y + 3y + 6 \\ \underline{y^2 + 5y + 6} \end{array}$$

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19) $(a+2)(a^2+3a+5)$

$$\begin{array}{r} a^3 + 3a^2 + 5a + 2a^2 + 6a + 10 \\ \underline{a^3 + 5a^2 + 11a + 10} \end{array}$$



Solve.

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

$$x^2 - 5x + 2x - 10 = x^2 - 3x - 1x + 3$$

$$x^2 - 3x - 10 = x^2 - 4x + 3$$

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

$$-3x - 10 = -4x + 3$$

$$-3x + 4x - 10 = -4x + 3 + 4x$$

$$x - 10 = 3$$

$$x - 10 + 10 = 3 + 10$$

$$x = 13$$

$$\{13\}$$

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2-42
even
(SKIP 28)