

Combined Operations.

Monday, March 9, 2020 9:49 AM

$$\begin{aligned}
 (2x+3)^2 &= (2x+3)(2x+3) \\
 &= 4x^2 + 6x + 6x + 9 \\
 &= 4x^2 + 12x + 9
 \end{aligned}$$

perfect square trinomial

$$\begin{aligned}
 (2x-5)(2x+5) &= 4x^2 + 10x - 10x - 25 \\
 &= 4x^2 - 25
 \end{aligned}$$

difference of squares

$$(4x+7)^2 = 16x^2 + 56x + 49$$

$$(3x-4)(3x+4) = 9x^2 - 16$$

$$\begin{aligned}
 (x+3)^3 &= (x+3)(x+3)(x+3) \\
 &= (x+3)(x^2 + 6x + 9)
 \end{aligned}$$

x	x^3	$+6x^2$	$+9x$
$+3$	$+3x^2$	$+18x$	$+27$

$$= x^3 + 9x^2 + 27x + 27$$

Review : $(2x+5) + (6x-7) = 8x-2$

$(3x-3) - (7x-4) = -4x+1$

$-3 - (-4)$

$-3 + 4$

$$(3x-3) + (-7x+4)$$

Simplify: $(4x)(3x-5) + (-2x)(7x+4)$

$$12x^2 - 20x - 14x^2 - 8x$$

$$-2x^2 - 28x$$

Try $3x(2x^2 - 7x + 4) - 5x(4x + 7)$

$$6x^3 - 21x^2 + 12x - 20x^2 - 35x$$

$$6x^3 - 41x^2 - 23x$$

$$(x+2)(2x-3) + (7x+2)(3x-1)$$

$$2x^2 - 3x + 4x - 6 + 21x^2 - 7x + 6x - 2$$

$$23x^2 - 8$$

Try: $(6x+2)(3x-1) - (2x+5)(2x+5)$

$$(18x^2 - 2) + (-4x^2 + 20x + 25)$$

$$14x^2 - 20x - 27$$

$$\frac{5 \times 2 \times 3}{10 \times 3}$$

$$\frac{5 \times 2 \times 3}{15 \times 2}$$

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

$$5(4x^2 + 12x + 9) - 4(9x^2 - 4)$$

$$20x^2 + 60x + 45 - 36x^2 + 16$$

$$-16x^2 + 60x + 61$$

$$5 \times (3 \times 3)$$

$$5 \times 9 = 45$$

$$(5 \times 3) \times 3$$

$$15 \times 3 = 45$$

Text Pg 210-213 #6, 10-16

HO Pg 348 # 17, 21 (odd letters)