



5-Minute Check

(over Lesson 8-5)

Transparency 8-6

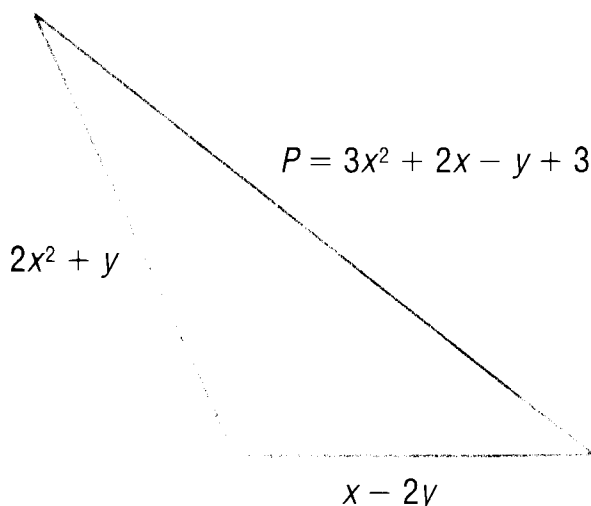
Find each sum or difference.

1. $(6a + 7b^2) + (2a^2 - 3a + b^2)$

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

3. $(6x^2 + 2x - 9) - (3x^2 - 8x + 2) + (x + 1)$

4. If P is the perimeter of the triangle and the measures of two sides are given, find the measure of the third side of the triangle.



5. **Standardized Test Practice** Which of the following polynomials was added to $x^2 + 7x - 2$ to get a sum of $-4x^2 - 5x + 11$?

(A) $5x^2 + 12x + 9$

(B) $3x^2 - 2x + 13$

(C) $-3x^2 + 2x - 9$

(D) $-5x^2 - 12x + 13$

ANSWERS

1. $2a^2 + 3a + 8b^2$

2. $4x^2 - 4x - 3$

3. ~~3~~ $x^2 + 11x - 10$

4. $x^2 + x + 3$

5. D

Ch. 8-6 Multiplying A POLYNOMIAL by A Monomial

EX1
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$$-2x^2(3x^2 - 7x + 10)$$

$$-2x^2(\overset{\curvearrowright}{3x^2} - \overset{\curvearrowright}{7x} + \overset{\curvearrowright}{10})$$

$$-2x^2 \cdot 3x^2 + 2x^2 \cdot 7x - 2x^2 \cdot 10$$

$$-2 \cdot 3 \cdot x^2 \cdot x^2 + 2 \cdot 7 \cdot x^2 \cdot x - 2 \cdot 10 \cdot x^2$$

$$\boxed{-6x^4 + 14x^3 - 20x^2}$$

$$-2x^2(\overset{\curvearrowright}{3x^2} - \overset{\curvearrowright}{7x} + \overset{\curvearrowright}{10})$$

$$\boxed{-6x^4 + 14x^3 - 20x^2} \checkmark$$

Ex 2 Pg 444

$$4(3d^2 + 5d) - d(d^2 - 7d + 12)$$

$$\underline{12d^2 + 20d} - \underline{d^3 + 7d^2 - 12d}$$

$$19d^2 + 8d - d^3 \quad \text{or} \quad \boxed{-d^3 + 19d^2 + 8d}$$

SOLVE EQUATIONS WITH POLYNOMIALSEx 4 Pg 445

$$y(y-12) + y(y+2) + 25 = 2y(y+5) - 15$$

$$\underline{y^2 - 12y} + \underline{y^2 + 2y} + 25 = 2y^2 + 10y - 15$$

$$\begin{array}{r} 2y^2 - 10y + 25 = 2y^2 + 10y - 15 \\ \underline{-2y^2} \qquad \qquad \underline{-2y^2} \\ 0 \qquad \qquad \qquad 0 \end{array}$$

$$\begin{array}{r} -10y + 25 = 10y - 15 \\ +10y \qquad \qquad +10y \end{array}$$

$$\begin{array}{r} 25 = 20y - 15 \\ +15 \qquad \qquad +15 \end{array}$$

$$40 = 20y \quad \therefore \boxed{y = 2}$$

G.P. $\Rightarrow$ Pg 446 #4, 6, 8, 10

HW: Read Ch. 8-6

Pg 446-447 # 15-20

29-32

39, 40
