

Reteaching 13-5 Adding and Subtracting Polynomials

Simplify $(5x^2 - 4x + 7) - (2x^2 - 3x + 12)$.

Add the opposite of each term in the second polynomial.

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

$$= 5x^2 - 4x + 7 - 2x^2 + 3x - 12$$

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

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

Write the opposite of each term in the second polynomial.

Group like terms.

Simplify. Notice $-4x + 3x = -x$.

Write $-x$ as subtraction.

Simplify each sum or difference.

1. $(3x - 2) - (4x + 3)$ _____

2. $(2x^2 - 4x + 1) - (x^2 - 2x + 1)$ _____

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

4. $(-x^2 + 3x - 1) + (3x^2 - x + 2)$ _____

5. $(4x^2 - 3x + 8) - (3x^2 - 2x + 10)$ _____

6. $(2x^2 - 7x - 9) + (x^2 - 3x + 2)$ _____

7. $(y^2 - 8y - 6) - (y^2 - 10y + 3)$ _____

8. $(4xy - 2x^2 + 3y^2) + (x^2 - 5xy - 7y^2)$ _____

9. $(7x^2 - 5xy - 6y) - (3xy + 5x^2 - 11y)$ _____

10. $(6k^2 - 9) - (4k + 3)$ _____

11. $(8ab - 7b) + (6b - 9ab)$ _____

12. $(5x^2 - 7xy - 12y^2) - (5xy + 3 - 6y^2)$ _____