Lesson 8-1 Adding and Subtracting Polynomials

Add or subtract as indicated. Put in standard form.

1. $(4x^2+8x-8)+(3x^2+x-8)$

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

3. $(-4x^2+x-1)+(x^2-8x-8)$

4. $(7x^2-8)+(4x-x^2-8)$

5. $(7x^2+2x+3)-(3x^2+7x-8)$

6. $(8x+1)-(3x^2+7x+4)$

7. $(4x+8x^2-8)+(x^2+5-8x)$

8. $(2x^2+7x)-(3x^2-4x+2)$

9. $(4-8x-2x^2)+(3x^2+x-8)$

10. $(5x-8x^2)-(x-8)$

11. $(-5x^2+8x+3)-(x^2-7x-3)$

12. $(4x^2-8)+(x-8)$

13. $(3x^2-5x+9)-(3x^2+5x-9)$

14. $(2x^3-5x^2-6x)-(4x^2+x-7)$

15. $(4x-2-8x^2)+(3+x^2-8x^3)$

16. $(4x^4+8x^2-8x)-(3x^3+x^2-8)$

17. $(6x^3+9x-1)+(3x^2+2x-2)$

18. $(4x^3-2x)-(3x^2-2x)$

Distributing Practice

The **distributive property** allows us to get around the order of operations by multiply expressions that are inside parentheses by the number or variable on the outside, even though we are not able to add what is inside the parentheses first.

Multiply and simplify:

1. $x(5x - 2)$

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

3. $3x(3x + 4)$

4. $4(3x + 4)$

5. $4n(2n + 6) + 3(2n + 6)$

6. $2n(6n + 1) - 5(6n + 1)$

7. $8p(6p + 2) - 2(6p + 2)$

8. $x(6x - 2) - 3(6x - 2)$

9. $3m(8m + 7) - 1(8m + 7)$

10. $2a(8a - 5) - (8a - 5)$