

Read section 1.4 and do odd exercises. (Don't turn these in from your text. They are all answered.)

Simplify the following by performing any operations, combining like terms, and writing in descending order.

1. $(3x^2 - 6x + 7) - (3x^2 - x + 19)$

2. $(7x^3 + 6x^2 - 4x - 13) + (-3x^3 - 4x^2 + 6x + 17)$

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

4. $(7x - 5)(7x + 5)$

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

6. $(3x + 2)^2$ HINT: $(3x + 2)^2 = (3x + 2)(3x + 2)$

7. $(6x - 7y)(2x + 3y)$

8. $(2x + 1)(2x - 1)$

9. $(5x + 4)(5x - 4)$

10. $(7x - 6)(7x + 6)$

11. $(x - 12)(x + 12)$

12. $(11x - 5)(11x + 5)$

13. $(2 - x)(2 + x)$

14. $(6x + 7)^2$

15. $(x - 1)(x^2 + 3x + 5)$

16) $(x + 1)(x + 2)(x + 3)$

17) $(2x^2 - x - 5)(x^2 + 2x + 6)$

18) $(3.12x - 6.7)(9.8x + 14.2)$