

Name \_\_\_\_\_

Date \_\_\_\_\_

**Practice Set 6.1**  
Adding and Subtracting Polynomials

Identify each polynomial as a monomial, a binomial, or a trinomial. Give the degree of the polynomial.

1.  $4x - 9$  1. \_\_\_\_\_

2.  $x^4 - 3x^2 + 2$  2. \_\_\_\_\_

3.  $9x^3$  3. \_\_\_\_\_

4.  $5$  4. \_\_\_\_\_

5.  $x^2 + 4x - 7$  5. \_\_\_\_\_

6.  $-3x^{15}$  6. \_\_\_\_\_

Add the following polynomials.

7. 
$$\begin{array}{r} 3x + 4 \\ -5x + 6 \\ \hline \end{array}$$
 7. \_\_\_\_\_

8. 
$$\begin{array}{r} 5x^2 - 2x - 4 \\ 3x^2 + 5x + 6 \\ \hline \end{array}$$
 8. \_\_\_\_\_

9. 
$$\begin{array}{r} -8x^2 - 3x + 1 \\ -4x^2 + x + 8 \\ \hline \end{array}$$
 9. \_\_\_\_\_

10.  $(12x^3 - 4x^2 + 5x + 9) + (-2x^3 + 6x^2 - 3x - 8)$  10. \_\_\_\_\_

Name \_\_\_\_\_

Date \_\_\_\_\_

11.  $(2x^2 + 4x - 8) + (3x^3 - 4x - 2)$

11. \_\_\_\_\_

12.  $\left(\frac{2}{3}x^2 + \frac{1}{5}x - \frac{3}{7}\right) + \left(-\frac{1}{3}x^2 + \frac{3}{5}x - \frac{3}{7}\right)$

12. \_\_\_\_\_

Subtract the following polynomials.

13. 
$$\begin{array}{r} 9x + 4 \\ -(-2x + 5) \end{array}$$

13. \_\_\_\_\_

14. 
$$\begin{array}{r} 7x^2 + 3x - 8 \\ -(-2x^2 - 4x + 6) \end{array}$$

14. \_\_\_\_\_

15. 
$$\begin{array}{r} 3x^2 - 5x + 1 \\ -(4x^2 + 4x - 1) \end{array}$$

15. \_\_\_\_\_

16.  $(0.5x^2 + 0.7x - 0.3) - (1.2x^2 - 2.4x + 1.1)$

16. \_\_\_\_\_

17.  $(9x^3 - 7x) - (-2x^2 + 4x - 3)$

17. \_\_\_\_\_

18. Subtract  $3x^2 + 5x - 4$  from  $-2x^2 + 7x - 8$

18. \_\_\_\_\_