

Algebra 1
Chapter 7 Review (7.1 - 7.4)

Name _____

Write the polynomial in standard form. Then state the leading coefficient and classify by degree and number of terms.

1. $7x^2 - 12x^3$	2. $7w + 16w^7 - 3w^4$	3. $9x$
SF:	SF:	SF:
LC:	LC:	LC:
Classify by degree:	Classify by degree:	Classify by degree:
Classify by # of terms:	Classify by # of terms:	Classify by # of terms:

Find the sum or the difference.

4. $(-12g - 4) + (14g + 7)$	5. $(t^3 - 2t^2 + 7) + (7t^2 - 13t^3 - 5t)$
6. $(10y + 4) - (-3y - 34)$	7. $(x^2 + 2x - 8) - (2x^2 - 5x + 9)$

Find the product.

8. $(n - 10)(n - 3)$	9. $(2r - 5)(r + 9)$
10. $(3y - 5)^2$	11. $(2m - 4)(2m - 4)$

12. $\left(\frac{1}{2}x + 3\right)(8x^2 - 4x + 6)$

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

14. A rectangular flower bed has a width of $(2x + 5)$ and a length of $(x + 10)$.

a. Write a polynomial that represents the area of the flower bed.

b. Find the area of the flower bed when the length is 25 feet.

Factor by finding the greatest common factor.

15. $5x^3 + 15x^2 - 25x$

16. $9y^2 + 15y + 3$

Solve the equation.

17. $(3x - 9)(2x + 10) = 0$

18. $(2x - 4)^2 = 0$

19. $5x^2 - 15x = 0$

20. $18g - 6g^2 = 0$