

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Per: \_\_\_\_\_

## 9.1 Practice

State whether each expression is a polynomial. If yes, identify it as a *monomial*, *binomial*, *trinomial* or *polynomial*.

1.  $5mn + n^2$

2.  $4by + 2b - by$

3.  $-32$

4.  $\frac{3x}{7}$

5.  $5x^2 - 3x^{-4}$

6.  $2c^2 + 8c + 9 - 3$

Find the degree of each polynomial.

7.  $12$

8.  $3r^4$

9.  $b + 6$

10.  $4a^3 - 2a$

11.  $5abc - 2b^2 + 1$

12.  $8x^5y^4 - 2x^8$

Arrange the terms of each polynomial in descending order.

13.  $3x + 1 + 2x^2$

14.  $3x^2y^4 + 14y^2 - 10x^3 + ax$

15.  $9x^2 + 2 + x^3 + x$

16.  $-3 + 3x^3 - x^2 + 4x$

17.  $7a^5b + 21a^4 - a^2b^2 - 15b^3$

18.  $5x - 6 + 3x^2$

19.  $x^2 + 3x^3 + 27 - x$

20.  $x - 3x^2 + 4 + 5x^3$

21.  $25 - x^3 + x$

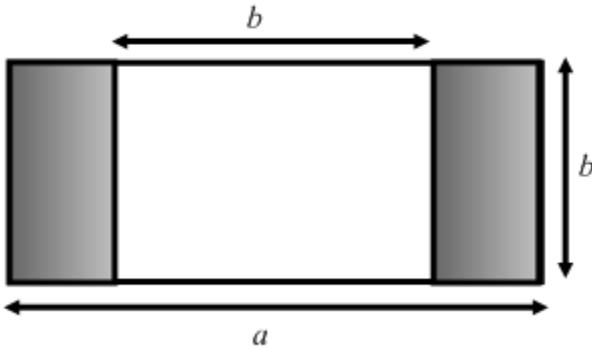
$$22. x^2 + 64 - x + 7x^3$$

$$23. 2xy + 32 - y^3x^2 + 6x^3$$

$$24. 13 - x^3y^3 + x^2y^2 + x$$

Write a polynomial to represent the area of each shaded region.

25.



26.

