## 9-1 Skills Practice: Add and Subtract Polynomials

1. Write the polynomial so that the exponents decrease from left to right. Identify the degree and leading coefficient of the polynomial.

**a.** 
$$4n^5$$
 **b.**  $4x - 2x^2 + 3$  **c.**  $6y^3 - 2y^2 + 4y^4 - 5$ 

2. Tell whether the expression is a polynomial. If it is a polynomial, find its degree and classify it by the number of its terms. Otherwise. tell why it is not a polynomial.

**a.** 
$$10^x$$
 **b.**  $-6n^2 - n^3 + 4$  **c.**  $w^{-3} + 5$ 

- **3.** Find the sum or difference.
  - **a.**  $(3z^2 + z 4) + (2z^2 + 2z 3)$ . **b.**  $(8c^2 - 4c + 1) + (-3c^2 + c + 5)$
  - **c.**  $(2x^2 + 5x 1) + (x^2 5x + 7)$ **d.**  $(10b^2 - 3b + 2) - (4b^2 + 5b + 1)$
  - e.  $(-4m^2 + 3m 1) (m + 2)$ f.  $(3m + 4) - (2m^2 - 6m + 5)$
- 4. Write a polynomial that represents the perimeter of the figure.





