# **Types of Algebraic Expressions**

### A. Choose the correct answer:

- 1. Which of the following is a monomial?
  - a) 2x + 5b) 7xyc)  $x^2 - y^2$ d) 3x + 2y + 1

## 2. An expression with two unlike terms is called:

- a) Monomial b) Binomial
- c) Trinomial d) Polynomial

### 3. The expression $3x^2 + 2x + 5$ is a:

- a) Binomial b) Trinomial
- c) Monomial d) Polynomial with two terms

# 4. Which of the following is not a polynomial?

a) x <sup>3</sup> – 4x + 7	b) $\frac{2}{x} + 3$
c) 5x <sup>2</sup> + 6	d) 7

# 5. A trinomial has how many terms?

a) 1	b) 2
c) 3	d) 4

# **B. Write the Missing Terms to Complete the Sentences:**

1. An algebraic expression with only one term is called a \_\_\_\_\_\_.

2. 4x + 5y is an example of a \_\_\_\_\_\_.

3. A polynomial with three terms is called a \_\_\_\_\_\_.

4. The expression 7 is a \_\_\_\_\_\_ type of polynomial.

5. The expression  $x^2 + 5x + 6$  belongs to the category of \_\_\_\_\_.

# C. Mark each sentence with a True ( ✔ ) or False (X):

- 1. A binomial always has two terms.
- 2. A monomial can have two variables multiplied together.

- 3. The expression  $2x^2 + 3x + 5$  is a binomial.
- 4. All polynomials must have more than one term.
- 5. A constant like 8 is considered a polynomial.

## D. Figure out the answers to these questions:

- 1. Identify whether the following expressions are monomial, binomial, trinomial, or polynomial:
  - a) 5x<sup>2</sup>
  - b) 2x + 3
  - c) x<sup>2</sup> + 3x + 2
- 2. Write a binomial whose degree is 3.
- 3. Classify the expression  $2x^3 + 3x^2 7x + 5$  based on the number of terms.
- 4. Give an example of a monomial, a binomial, and a trinomial.
- 5. If  $p(x) = x^2 + 2x + 1$ , find p(2).

## E. Challenge yourself with these questions:

- 1. Find the degree of the polynomial  $5x^3 2x^2 + 7$ .
- 2. Classify the expression  $-7x^5 + 4x^3 3x + 6$ .
- 3. Write an example of a trinomial with degree 4.
- 4. Construct a binomial expression involving x and y of degree 2.
- 5. Identify and list the coefficients in the expression  $6x^2 5x + 8$ .