

## Algebraic Expressions Ex 7.1 Q1

#### Answer:

The monomials, binomials, trinomials and quadrinomials are as follows.

- (i) a<sup>2</sup> is a monomial expression as it contains one term only.
- (ii) a<sup>2</sup> b<sup>2</sup> is a binomial expression as it contains two terms.
- (iii)  $x^3 + y^3 + z^3$  is a trinomial expression as it contains three terms.
- (iv)  $x^3 + y^3 + z^3 + xyz$  is a quadrinomial expression as it contains four terms.
- (v) 7 + 5 = 12 is a monomial expression as it contains one term only.
- (vi) abc +1 is a binomial expression as it contains two terms.
- (vii) 3x 2 + 5 = 3x + 3 is a binomial expression as it contains two terms.
- (viii) 2x 3y + 4 is a trinomial expression as it contains three terms.
- (ix) xy + yz + zx is a trinomial expression as it contains three terms.
- (x)  $ax^3 + bx^2 + cx + d$  is a quadrinomial expression as it contains four terms.

### Algebraic Expressions Ex 7.1 Q2

### Answer:

The terms of each of the given algebraic expressions are as follows.

- (i) 3x is the only term of the given algebraic expression.
- (ii) 2x and -3 are the terms of the given algebraic expression.
- (iii) 2x2 and -7 are the terms of the given algebraic expression.
- (iv) 2x<sup>2</sup>, y<sup>2</sup>, -3xy and 4 are the terms of the given algebraic expression.

### Algebraic Expressions Ex 7.1 Q3

### Answer:

### Like terms

# (i) 4xy, -3yx

(ii) 
$$\{7a^2bc, -3ca^2b, -\frac{4}{3}cba^2\}$$
  
 $\{-\frac{5}{2}abc^2, \frac{3}{2}abc^2\}$ 

## **Numerical coefficients**

4, -3
$$\{7, -3, -\frac{4}{3}\}$$

$$\{-\frac{5}{2}, \frac{3}{2}\}$$

# Algebraic Expressions Ex 7.1 Q4 Answer:

The like terms in the given algebraic expressions are as follows

- (i) The like terms in the given algebraic expression are a<sup>2</sup> and -2a<sup>2</sup>.
- (ii) The like terms in the given algebraic expression are  $-2 \, yz$  and  $\frac{5}{2} \, zy$ .
- (iii) The like terms in the given algebraic expression are ab<sup>2</sup>c, 2acb<sup>2</sup>, b<sup>2</sup>ac and 3cab<sup>2</sup>.

### Algebraic Expressions Ex 7.1 Q5

# Answer:

The coefficients of x are as follows.

- (i) The numerical coefficient of x is -12.
- (ii) The numerical coefficient of x is -7y.
- (iii) The numerical coefficient of x is yz.
- (iv) The numerical coefficient of x is -7a.

Algebraic Expressions Ex 7.1 Q6

# Answer:

The coefficients of  $x^2$  are as follows.

- (i) The numerical coefficient of x<sup>2</sup> is -3.
- (ii) The numerical coefficient of x<sup>2</sup> is 5yz.
- (iii) The numerical coefficient of  $x^2$  is  $\frac{5}{7}$  z.
- (iv) The numerical coefficient of  $x^2$  is  $-\frac{3}{2}a$ .

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