

## **Chapter 4. Algebraic Expressions**

1) A polynomial having one term is called

- A) monomial
- B) Binomial
- C) Trinomial
- D) None of these

Answer: A

2) A polynomial having two term is called

- A) Binomial
- B) Trinomial
- C) Binomial
- D) None of these

Answer: C

3) The degree of  $x^4y + y^2 + y^3$  is

- A) 4
- B) 5
- C) 6
- D) 7

Answer: B

4) The degree of polynomial  $x^2 + xy + y^2$  is

- A) 3
- B) 4
- C) 6
- D) 2

Answer: D

5) The degree of the polynomial 9 is

- A) 1
- B) 2
- C) 3
- D) 0

Answer: D

6)  $(a + b + c)^2 =$

- A)  $a^2 + b^2 + c^2 + 2ab + abc + 2ca$
- B)  $a^2 + b^2 + c^2 + 2ab + 2ac + 2ca$
- C)  $a^2 + b^2 + c^2 + 2ab + abc + 2ca$
- D)  $a^2 + b^2 - c^2 + 2ab + abc + 2ca$

Answer: A

7) If  $a + b = 2$ ,  $a - b = 2$  then  $a^2 + b^2 =$

- A) 4
- B) 5
- C) 3
- D) 2

Answer: B

8)  $(a+b)^2 + (a-b)^2 =$

- A)  $3(a^2 - b^2)$
- B)  $2(a^2 - b^2)$
- C)  $4(a^2 - b^2)$
- D)  $2(-a^2 - b^2)$

Answer: B

9)  $x + \sqrt{3}$  is a \_\_\_\_\_ expression.

- A) rational
- B) irrational
- C) polynomial
- D) none

Answer: C

10)  $y + \frac{1}{\sqrt{y}}$  is a \_\_\_\_\_ expression.

- A) rational
- B) irrational
- C) polynomial
- D) none

Answer: B

11) If  $x = -2$  and  $y = 2$  the value of  $x^2 - xy + y^2$

- A) 4
- B) 3
- C) 8
- D) 12

Answer: D

12)  $(p - q)^3 =$

- A)  $p^3 + 3p^2q + 3pq^2 + q^3$
- B)  $p^3 - 3p^2q + 3pq^2 + q^3$
- C)  $p^3 - 3p^2q + 3pq^2 - q^3$
- D) none

Answer: C

13)  $(x+2)(x+4) = x^2 + \underline{\quad} + 8$

- A)  $7x$
- B)  $6x$
- C)  $2x$
- D) none

Answer: A

14)  $(\sqrt{x} + \sqrt{y})(\sqrt{x} - \sqrt{y}) =$

- A)  $x^2 - y^2$
- B)  $x^2 + y^2$
- C)  $-x^2 - y^2$
- D)  $x - y$

Answer: D