

Chapter 5. Factorization, H.C.F, L.C.M, simplification and Square root

1) Factors of $(a^2 - \frac{1}{4})$ are

- A) $(a + \frac{1}{2})(a - \frac{1}{3})$
- B) $(a + \frac{3}{2})(a - \frac{1}{3})$
- C) $(a + \frac{1}{2})(a - \frac{1}{3})$
- D) none

Answer: C

2) $a^4b^2 - a^2b^4 = a^2b^2 (\quad) (\quad)$

- A) $(a+b)(a+b)$
- B) $(a+b)(a - b)$
- C) $(a-b)(a-b)$
- D) none

Answer: B

3) If $(x^3 - x^2 - 226x + 1410)$ is divided by $(x+17)$ then remainder is

- A) 0
- B) 20
- C) 40
- D) 50

Answer: D

4) factors of $(a^3 - 27)$ are

- A) $(a+3)(a^2-3a+9)$
- B) $(a-3)(a^2+3a+9)$
- C) $(a+3)(a^2-3a+9)$
- D) none

Answer: B

5) Highest common factor is also known as

- A) highest factor
- B) Greatest common divisor
- C) Both A and B
- D) none

Answer: B

6) H.C.F can be found by ____ methods.

- A) 4
- B) 3
- C) 2
- D) 9

Answer: C

7) The two methods of finding H.C.F are

- A) factor method and algebraic method
- B) factor method and numerical method

- C) factor method and division method
- D) none

Answer: C

8) $2(a - b)^2 - (a - b)^3 =$

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

Answer: A

9) H.C.F, G.C.D of $x^3 + 8y^3$ and $x + 2y =$

- A) $x - 2y$
- B) $x - 2xy$
- C) $x + 2y$
- D) none of these

Answer: A

10) L.C.M of $x^3 + 8y^3$ and $x + 2y =$

- A) $(x+2y)(x^2+2xy+4y^2)$
- B) $(x-2y)(x^2+2xy+4y^2)$
- C) $(x+2y)(x^2-2xy+4y^2)$
- D) $(x+2y)(x^2+2xy - 4y^2)$

Answer: C

11) $(a^2 - b^2)^2 =$

- A) $(a^2+2ab+b^2)(a^2 - 2ab+b^2)$
- B) $(a^2-2ab+b^2)(a^2 - 2ab+b^2)$
- C) $(a^2+2ab+b^2)^2$
- D) none

Answer: A

12) Factors of $x^2 - y^4$ are

- A) $(x+y^2)(x - y^2)$
- B) $(3x+y^2)(x - y^2)$
- C) $(x-y^2)(x - y^2)$
- D) $(2x-y^2)(x - y^2)$

Answer: A

13) L.C.M of two or more polynomials is found by two methods which are

- A) by Factorization and by algebra
- B) by Factorization and by H.C.F
- C) by Factorization and by hypothesis
- D) none

Answer: B