

Factorization and Algebraic Manipulation

Sr	Questions	Answers Choice
1	The LCM of $16x^2$, $4x$ and $30xy$ is	A. $480x^3y$ B. $240xy$ C. $240x^2y$ D. $120x^4y$
2	The LCM of $(a-b)^2$ and $(a-b)^4$	A. $(a-b)^2$ B. $(a-b)^3$ C. $(a-b)^4$ D. $(a-b)^6$
3	The factors of $4x^2 - 12y + 9$ are	A. $(2x+3)^2$ B. $(2x-3)^2$ C. $(2+3x)(2-3x)^2$ D. $(2x-3)(2x+3)$
4	What should be added to complete the square of $y^4 + 81$	A. $18y^2$ B. $-18y^2$ C. $9y^2$ D. $18y$
5	The factors of $x^2 - 5x + 6$ are	A. $x+1$, $x-6$ B. $x-2$, $x-3$ C. $x+6$, $x-1$ D. $x+2$, $x+3$
6	What will be added to complete the square of $9a^2 - 12ab$?	A. $-16b^2$ B. $16b^2$ C. $4b^2$ D. $-4b^2$
7	H.C.F. of $m-2$ and m^2+m-6 is	A. $m+2$ B. $m+3$ C. m^2+m-6 D. $m-2$
8	Factorization of $x^3 + 3x^2 + 3x + 1$ is	A. $(x+1)^3$ B. $(x-1)^3$ C. $(x+1)(x^2+x+1)$ D. $(x-1)(x^2-x+1)$
9	$(x+y)(x^2-xy+y^2) =$	A. x^3-y^3 B. x^3+y^3 C. $(x+y)^3$ D. $(x-y)^3$
10	L.C.M. of a^2-b^2 and a^4-b^4 is	A. a^2+b^2 B. a^2-b^2 C. a^4-b^4 D. $a-b$
11	One of factors of $x^3 - 27$ is	A. $x-3$ B. $x+3$ C. x^2-3x+9 D. Both a and c
12	The square root of $x^2 - 6x + 9$ is	
13	Factors of $x^4 - y^4$	A. $(x-y)(x+y)(x^2+y^2)$ B. $(x-y)(x^2+y^2)$ C. $(x-y)(x+y)(x^2-y^2)$ D. $(x+y)(x^2+y^2)$
14	H.C.F. of $x^3y - xy$ and $x^5y^2 - x^2y^5$ is	A. $xy(x^2-y^2)$ B. $xy(x-y)$ C. $x^2y^2(x-y)$ D. $xy(x^3-y^3)$
15	Let $5x^2 - 17xy - 12y^2 = A \times B$ if $A = (x-4y)$ then B is.	A. $(5x+3y)$ B. $(5x-3y)$ C. $(5x+3y)$ D. $(5x-4y)$
16	Factors of $8x^3 - y^3$ are	A. $(2x+y)(4x^2+2xy-y^2)$ B. $(2x+y)(4x^2-2y+y^2)$ C. $(2x-y)(4x^2-2xy+y^2)$

D. $(2x-y)(4x^2+2xy+y^2)$

17	Cubic polynomial has degree	A. 1 B. 2 C. 3 D. 4
18	Find m so that $x^2 + 8x + m$ is a complete square.	A. 8 B. -8 C. 4 D. 16
19	The product of two polynomials is equal to theof their H.C.F and L.C.M	A. Sum B. Difference C. Product D. Quotient
20	H.C.F of $35a^2b^2$ and $20a^3b^3$ is	A. $5a^2b^2$ B. $20a^3b^3$ C. $35a^5b^5$ D. $5ab$