

ECAT (Pre-Eng) Mathematics Chapter 6 Quadratic Equations

Sr	Questions	Answers Choice
1	The set of real roots of the equation $\log_{(5x+4)}(2x+3)^3 - \log_{(2x+3)}(10x^2+23x+12) = 1$ is	A. $\{-1\}$ B. $\{-3/5\}$ C. Empty set D. $\{-1/3\}$
2	Roots of the equation $x^2 - 7x + 10 = 0$ are	A. $\{2, 5\}$ B. $\{-2, 5\}$ C. $\{2, 5\}$ D. $\{-2, -5\}$
3	The value of x for which the polynomials $x^2 - 1$ and $x^2 - 2x + 1$ vanish simultaneously is	A. 2 B. 1 C. -1 D. -2
4	Both the roots of the equation $(x-b)(x-c) + (x-c)(x-a) + (x-a)(x-b) = 0$ are always	A. Positive B. Negative C. Real D. None of these
5	Two quadratic equation in which xy term is missing and the coefficients of x^2 and y^2 are equal, give a linear equation by _____	A. Addition B. Subtraction C. Multiplication D. Division
6	$w^{28} + w^{38} =$ _____	A. 0 B. 1 C. w D. -1
7	The roots of $(b-c)x^2 + (c-a)x + a-b = 0$ are equal if	A. $2b = a+c$ B. $2a = b+c$ C. $2c = a+b$ D. $a + b + c = 0$
8	The solution of the quadratic equation $x^2 - 7x + 10 = 0$, is	A. 2 B. 5 C. 2, 5 D. 7
9	If $3x^4 + 4x^3 + x - 5$ is divided by $x + 1$, then the remainder is	A. 0 B. 7 C. -7 D. 5
10	If the roots of $3x^2 + kx + 12 = 0$ are equal then $k =$ _____	
11	The maximum value of the quadratic function $f(x) = -2x^2 + 20x$, is	A. 4 B. 3 C. 50 D. 7
12	A quadratic equation has two	A. roots B. degree C. variables D. constants
13	The quadratic formula is	
14	The cube roots of 8 are	
15	Question Image	A. 0 B. 1 C. 2 D. None of these
16	Question Image	A. 1 B. 2 C. 0 D. 4
17	Each complex cube root of unity is square of	A. itself B. 1 C. -1 D. ..

U. the other

18 Which of the following is a factor of $x^3 - 3x^2 + 2x - 6$

- A. $x + 2$
- B. $x + 3$
- C. $x - 3$
- D. $x - 4$

19 The condition for polynomial equation $ax^2 + bx + c = 0$ to be quadratic is

- A. $a > 0$
- B. $a < 0$
- C. $a \neq 0$
- D. $a \neq 0, b \neq 0$

20 the largest degree of the terms in the polynomials is called

- A. terms of the polynomial
- B. degree of a polynomial
- C. co-efficient
- D. monomial