

Mathematics ECAT Pre Engineering Chapter 6 Quadratic Equations Online Test

Sr	Questions	Answers Choice
1	If the roots of ax^2 - bx - c = 0 change by the same quantity, then the expression in a, b, c that does not change is	
2	The graph of a quadratic function is	A. Circle B. Ellipse C. Parabola D. Hexagon
3	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
4	Question Image	A. Rational B. Irrational C. Non-real D. Zero
5	A polynomial of arbitrary degree	A. $f(x) = 0$ B. $f(x) = x$ C. $f(x) = a$ D. $f(x) = ax + b, a \ne 0$
6	The standard form of the quadratic function $f(x) = -x^2 + 4x + 2$, is	A. (x-2) ² +6 B(x-2) ² + 6 C. (x-3) ² +5 D. (x+4) ² -7
7	Question Image	
8	If $a > 0$, $b > 0$, $c > 0$, then the roots of the equation $ax^2 + bx + c = 0$ are	A. Real and negative B. Non-real with negative real parts C. Real and positive D. Nothing can be said
9	Question Image	
10	The solution of equation $x^2 + 2 = 0$ in the set of real number is	A. Infinite set B. Singleton set C. Null set D. None of these
11	If $x^2 + px + 1$ is a factor of $ax^3 + bx + c$, then	A. a ² + c ² = -ab B. a ² - c ² = -ab C. a ² - c ² = ab D. None of these
12	The condition for polynomial equation $ax2 + bx + c = 0$ to be quadratic is	A. a > 0 B. a < 0 C. a≠ 0 D. a≠ 0,b ≠ 0
13	For the equation $ x^2 + x - 6 = 0$, the roots are	A. One and only one real number B. Real with sum one C. Real with sum zero D. Real with product zero
14	x^4 - 3 x^3 + 3 x + 1 = 0 is called	A. Reciprocal equation B. Exponential equation C. Radical equation D. None of these
15	The vertex of the graph of the quadratic function $f(x) = -x^2 + 6x + 1$, is	A. (-3,10) B. (-3,-10) C. (3,10) D. (3,-10)
16	Another name of quadratic equation is	A. Polynomial B. 2nd degree polynomial C. Linear equation D. simaltaneous equations

7	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
8	The cube roots of 8 are	
19	The roots of the equation x2 +6x-7=0, are	A. 1 B. 2 C. 1 and -7 D7
:0	Which of the following is factor of $p(x) = 2x3 + 3x2 + 3x + 2$?	A. x+1 B. 2x+1 C. 3x+1 D. 2x-1