

ECAT (Pre-Eng) Mathematics Chapter 6 Quadratic Equations

Sr	Questions	Answers Choice
1	The graph of a quadratic function is	A. Circle B. Ellipse C. Parabola D. Hexagon
2	The cube roots of 8 are	
3	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 15 B. 9 C. 7 D. 8
4	A quadratic equation has two	A. roots B. degree C. variables D. constants
5	The root of the quadratic equation are	A. 3 B. 2 C. 1 D. 4
6	A quadratic equation in x is an equation that can be witten in the form	A. $ax^2 + b = 0$ B. $ax^3 + b^2 + c = 0$ C. $ax^2 + bx + c = 0$ D. $ax^3 + bx^3 + cx = 0$
7	In quadratic equation $f(x) = ax^2$, if $a > 0$, then the graph of parabola	A. Opens up B. Opens down C. close up D. symmetric w.r.t.x.axis
8	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)
9	The minimum value of the quadratic function $f(x) = 5x^2 - 11$, is	A. -11 B. 6 C. -7 D. 7
10	Another name of quadratic equation is	A. Polynomial B. 2nd degree polynomial C. Linear equation D. simultaneous equations
11	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
12	Find a if 1 is a root of the equation $x^2 + ax + 2 = 0$	A. 3 B. -3 C. 2 D. 0
13	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 0 B. 1 C. 2 D. None of these
14	If the roots of $3x^2 + kx + 12 = 0$ are equal then $k =$ _____	
15	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $b = c$ B. $a = c$ C. $a = b$ D. $b = 0$
16	$(x-1)$ is a factor of	A. $2x^3 - 3x^2 + 9$ B. $2x^3 - 5x - 8$ C. $48x^2 - 46x - 9$ D. $x^9 - 1$

17	If a polynomial $p(x)$ is divided by $x-c$, then the remainder is	<p>A. $p(x)$ B. $x-c$ C. c D. $P(c)$</p>
18	The roots of $ax^2+bx+c=0$ are	<p>A. Rational $\Leftrightarrow b^2-4ac \geq 0$ B. Irrational $\Leftrightarrow b^2-4ac > 0$ C. Real $\Leftrightarrow b^2-4ac \neq 0$ D. Rational $\Leftrightarrow b^2-4ac = 0$</p>
19	If the roots of $ax^2+bx+c=0$ are real and distinct then	<p>A. $ab > 0$ B. $a = 0$ C. $ab < 0$ D. $a > 0, b > 0$</p>
20	If $w+2$ is a root of $(x+1)(x+2)(x+3)(x+4) = k$, then	<p>A. $k=0$ B. $k=1$ C. $k=w$ D. $k=w^2$</p>