

* Creative Math Masathi *

Preparation of CET

Math 1

Chapter 2 - Quadratic Equation

1) Which one is quadratic equation?

A) $\frac{5}{x} - 3 = x^2$

B) $x(x+5) = 2$

C) $n-1 = 2n$

C) $\frac{1}{x^2}(x+2) = x$

2) Out of the following equations which one is not a quadratic equation?

A) $x^2 + 4x = 11 + x^2$

B) $x^2 = 4x$

C) $5x^2 = 90$

D) $2x - x^2 = x^2 + 5$

3) The roots of $x^2 + kx + k = 0$ are real and equal, find k

A) 0

B) 4

C) 0 or 4

D) 2

4) For $\sqrt{2}x^2 - 5x + \sqrt{2} = 0$ find the value of the determinant

A) -5

B) 17

C) $\sqrt{5}$

D) $2\sqrt{2} - 5$

5) Which of the following quadratic equation has roots 3 and 5?

A) $x^2 - 15x + 8 = 0$

B) $x^2 - 8x + 15 = 0$

C) $x^2 + 3x + 5 = 0$

D) $x^2 + 8x - 15 = 0$

6) Out of the following equations, find the equation having the sum of its roots -5

A) $3x^2 - 15x + 3 = 0$

B) $x^2 - 5x + 3 = 0$

C) $x^2 + 3x - 5 = 0$

D) $3x^2 + 15x + 3 = 0$

7) $\sqrt{5}m^2 - \sqrt{5}m + \sqrt{5} = 0$ which of the following statement is true for this given equation?

A) Real and unreal roots

B) Real and equal roots

C) Roots are not real

D) Three roots

8) one of the roots of equation $x^2 + mx - 5 = 0$ is 2; find the value of 'm'

A) -2

B) $-\frac{1}{2}$

C) $\frac{1}{2}$

D) 2

9) Degree of quadratic equation is always _____

A) 1

B) 2

C) 3

D) 4

10) product of pragati's age two years ago and 3 years hence is 84. find her present age

A) 6 years

B) 7 years

C) 8 years

D) 9 years

11) find the roots of equation $m^2 - 14m + 13 = 0$

A) (13, 1)

B) (13, 2)

C) (14, 1)

D) (14, 2)

12) If $a=1$, $b=14$, $c=13$ then find $b^2 - 4ac$

A) 144

B) 248

C) 441

D) 256

13) find the roots of equation $(m+4)(m-4) = 0$

A) (4, 4)

B) (4, -4)

C) (16, 16)

D) (16, -16)

14) write the given quadratic equation in standard form: $m(m-6) = 9$

A) $m^2 - 6m = 9$

B) $m^2 - 6m + 9 = 0$

C) $m^2 - 6m - 9 = 0$

D) $m^2 + 6m - 9 = 0$

15) $2x^2 - 5x = -7$ find the value of a, b and c

A) $a=2$, $b=-5$, $c=-7$

B) $a=2$, $b=-5$, $c=7$

C) $a=2$, $b=5$, $c=7$

D) $a=-7$, $b=-5$, $c=2$