

KHAN GLOBAL STUDIES

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Defence (Mathematics)

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Quadratic Equation dpps-1

1. $a(x^2 + 4) = x(a^2 + 4)$ then $x = ?$
(a) $a, 2a$ (b) $a, \frac{a}{4}$
(c) $a, \frac{4}{a}$ (d) None of these
2. $\frac{x-p}{q} + \frac{x-q}{p} = \frac{q}{x-p} + \frac{p}{x-q}$ then $x = ?$
(a) $\frac{p^2-q^2}{p^2+q^2}$ (b) $\frac{p^2+q^2}{p+q}$
(c) $\frac{p^2+q^2}{p-q}$ (d) $\frac{2pq}{p^2+q^2}$
3. $\frac{a}{ax-1} + \frac{b}{bx-1} = a + b$ then x
(a) $\frac{a+b}{ab}$ (b) $\frac{ab}{a-b}$
(c) $\frac{2ab}{a+b}$ (d) None of these
4. $x^2 - (7-i)x + 18 - i = 0$ then x
(a) $4 - 3i$ (b) $4 + 3i$
(c) $3 + 4i$ (d) $3 - 4i$
5. $\frac{1}{x-a} + \frac{1}{x-b} = \frac{1}{a} + \frac{1}{b}$ then x
(a) $\frac{2b}{a+b}$ (b) $\frac{2ab}{a-b}$
(c) $\frac{a-b}{2ab}$ (d) $\frac{2ab}{a+b}$
6. $x = \sqrt{20 + \sqrt{20 + \sqrt{20 + \dots \infty}}}$ then x
(a) 5 (b) 6
(c) 20 (d) None of these
7. $x = \sqrt{8 - \sqrt{8 - \sqrt{8 - \dots \infty}}}$ then x
(a) -1 (b) $\frac{-1+\sqrt{33}}{4}$
(c) $\frac{+1+\sqrt{33}}{2}$ (d) None of these
8. Value of $2 - \frac{1}{2 - \frac{1}{2 - \dots \infty}}$
(a) $x = 1$ (b) 2
(c) $1 + \sqrt{2}$ (d) None of these
9. $(x^2 - 3x)^2 + 3(x^2 - 3x) + 2 = 0$ then x
(a) 1, 2 (b) 2, 4
(c) 1, 3 (d) 2, 6
10. Find x , $2^{x+1} + 4^x = 8$
(a) $x = 1$ (b) $x = 2$
(c) $x = 3$ (d) None
11. $(5 + 2\sqrt{6})^{x^2-3} + (5 - 2\sqrt{6})^{x^2-3} = 10$ then sum of all real roots (सभी वास्तविक मूलों का योग है।)
(a) 4 (b) 8
(c) 0 (d) None of these

Answer Key

1	C	7	D
2	B	8	A
3	A	9	A
4	A	10	A
5	D	11	C
6	A		