

Answer Key to Quadratic Equations and Inequations

Level - 1	Daily Tutorial Sheet - 1 to 5
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1.	2.	3.	4.	5.	6.	7.	8.	9.	
-5	5	4	2	-2	1	2	1 / 2, 1 / 4		1
10.	11.	12.	13.	14.	15.	16.	17.	18.	
23,-9 / 5	2-√2	1 / 4	100	25	3	3	$\left(\frac{-1\pm\sqrt{21}}{2}\right)$		2√2, 2(1+√3)
19.	20.	21.	22.	23.	24.	25.	26.		
-2, 2, 4	$\frac{1}{2}, -\frac{5}{2}$	[2, ∞)	1	1-√7, 2	2, 1	x ≤ 0	x ∈ (-2, 0) ∪ (2, ∞)		
27.		28.	29.		30.		31.		
x ∈ (-1, 2)		ϕ	x ∈ R		C		x ∈ [4, 9]		
32.									
f(x) > 0 ∀ x ∈ (-5, -2) ∪ (-1, 3) ∪ (7, ∞), f(x) < 0 ∀ x ∈ (-∞, -5) ∪ (-2, -1) ∪ (3, 7)									
33.			34.				35.	36.	
x ∈ (-∞, -4] ∪ (-2, 1] ∪ (3, ∞) ∪ {2}			x ∈ (-∞, 1) ∪ (2, 3) ∪ (3, 4) ∪ (4, 5)				C	D	
37.	38.			39.		40.			
A	[2, 3]			x ∈ (-1, 0)		x ∈ (-8, -2) ∪ (0, 2)			
41.			42.	43.	44.	45.	46.	47.	
x ∈ (-∞, 1) ∪ (1, 3) ∪ (4, ∞)			x ∈ [1, 6]	B	C	D	B	A	
48.	49.	50.	51.	52.	53.	54.	55.	56.	
B	D	A	B	D	B	A	A	B	
57.	58.	59.	60.	61.	62.	63.	64.	65.	
C	D	A	D	B	C	D	A	C	
66.	67.	68.	69.	70.	71.	72.	73.	74.	75.
A	A	B	C	B	C	B	C	B	AC

Level – 2 & Numerical Value Type	Daily Tutorial Sheet – 6 to 12
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76.	77.	78.	79.	80.	81.	82.	83.	84.	85.
C	A	B	A	C	B	D	A	CD	B
86.	87.	88.	89.	90.	91.	92.	93.	94.	95.
C	A	C	C	B	D	D	A	A	D
96.	97.	98.	99.	100.	101.	102.	103.	104.	105.
D	D	C	B	B	B	C	D	B	C
106.	107.	108.	109.	110.	111.	112.	113.	114.	115.
B	A	C	C	B	A	A	B	A	B
116.	117.	118.	119.	120.	121.	122.	123.	124.	125.
C	B	C	B	C	C	B	A	C	B
126.	127.	128.	129.	130.	131.	132.	133.	134.	135.
C	B	C	C	A	A	C	C	D	A
136.	137.	138.	139.	140.	141.	142.	143.	144.	145.
D	D	B	D	3	6	9	1	7	1
146.	147.	148.	149.	150.	151.	152.	153.	154.	
3	4	5	4	0	1	1	1	2	

JEE Main (Archive)	Daily Tutorial Sheet – 1 to 2
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1	2	3	4	5	6	7	8	9	10
C	D	B	B	C	A	ABC	A	D	A
11	12	13			14			15	
A	B	$y \in \{-1\} \cup [1, \infty)$			$x \in (-2, -1) \cup (-2/3, -1/2)$			$\pm 2, \pm \sqrt{2}$	
16		17	18	19	20		21	22	23
$x = a^{-1/2}$ or $a^{-4/3}$		B	B	A	$x \in [1 - \sqrt{5}, 1) \cup (2, 1 + \sqrt{5}]$		4	2	$(-4, 7)$

JEE Advanced (Archive)	Daily Tutorial Sheet – 1 to 2
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1	2	3	4	5	6	9			
D	B	A	A	D	1210	$(q-s)^2 - rpq - rsp + sp^2 + qr^2$			
10	11	12	14	15	16	17	18	19	20
$q^2 - p^2$	A	$a > 1$	2	D	D	C	ABC	4	D