

**NAVODAYA VIDYALAYA SAMITI,
ANSWER SCHEME:
MATHEMATICS (BASIC):
PRE BOARD-2**

SECTION A

S.NO.	option	ans	
1	c	115	
2	c	116	
3	b	-10	
4	c	-2	
5	c	B=D	
6	a	2	
7	c	$\sqrt{3}$	
8	b	$2\pi a(a+b)$	
9	b	Parallel	
10	b	5:1	
11	a	25	
12	a	180	
13	b	1:2	
14	c	2	
15	b	15	
16	d	none	
17	c	114°	
18	a	$\frac{3}{13}$	
19	d	Both are wrong	
20	a	Both are right	

SECTION B			
21	k =6		
22	using theorem 6.1 it will be proved		
23	4.106 sqr MTR		
24	8 cm		
25	$(\sqrt{3}+1)/2\sqrt{2}$		
SECTION C			
26	Prove it by proper method		
27	x =1,-3/4		
28	k =1/2		
29	40°		
30	(a)5/36. (b)1/6. (c)1/4		
31	change cosecA and secA in terms of sinA and cosA ,then prove it using various properties. or. change sinA in cosA first,then using property find the concern terms		
SECTION D			
32	Area of Minor segment = 20.4375 sqr cm , Area of Major segment =686.0625. or. Area of table cover = 464.80 sqr mtr. Total cost = 162.68/-		
33	(a) 11x-9y+4=0, 6x-5y+3 =0 (b)draw the graph using appropriate measure. (c)x = 7,y. =9. and so the fraction is 7/9		
34	Mode = 30.6	Mean = 29.22	
35	volume of wooden pen stand = volume of cuboid -4x volume of conical depression by solving we get the volume =523.53 cube or. Total surface area of decorative block = 332.50 sqr mtr		
SECTION -E CBQ			
36	(i)45°	(ii)30° , alternate angle	(iii)PD = 100 m. or. DQ = 100√3 m
37	(i)2 unit	(ii)2 unit	(iii)prove AB =BC. and also prove property of right angle triangle
38	(i)10,16,22,28....	(ii)150 m	(iii)370 m. or. 5 potatoes