	Α	В	С	D	Е	F	G	Н		J	K
1	Marks distribution of 1000 students follows Normal distribution with mean 60 and S.D. 10. From this group										
2	one student is selected at random, compute the probability that mark of the student lies										
3		i) below 70			ii) more than 65		iii)between 55 to 65				
4	Also, estimate the number of students			whose mark is							
5	i) atleast 62		ii) atmost 70		iii) between 58 to 68						
6								•		•	
7	Solution :- L	et, x = Mark	s								
8	Here, we ha	ve									
9		Mean(µ)=	60		S.D.(σ)=	10	N=	1000			
10	First part										
11	i) Req. prob.	= p(x<70)=			0.8413	0.84134474					
12	ii) Req. prob. = p(x>65)=				0.3085	0.30853753	9				
13	iii) Req. pro	b. = p(55 < x <	65)=		0.3829						
14					0.382924923	3	•			•	
15	Second part	•									
16	i) Req. No. = N*p(x≥62)=				421	420.740290	6				
17	ii) Req. No. = N*p(x≤70)=				841	841.344746	1				
18	iii) Req. No.	=N*p(58< x	<68)=		367						
19					367.4043109	)			·		
20											
21				Name:Karir	ıa Kc						1
22				Roll No:15							1
23											

	Α	В	С	D	Е	F	G	Н	I	J	K
1	Marks distribution of 1000 students follows Normal distribution with mean 60 and S.D. 10. From this group										
2	one student is selected at random, compute the probability that mark of the student lies										
3	i) below 70		ii) more than 65		iii)between 55 to 65						
4	Also, estimate the number of students			whose mark is							
5	i) atleast 62		ii) atmost 70		iii) between 58 to 68						
6											
7	Solution : Let , $x = Marks$										
8	Here, we have	ve									
9		Mean(µ)=	60		S.D.(σ)=	10	N=	1000			
10	First part										
11	i) Req. prob. = $p(x<70)$ =				0.8413	0.84134474	6				
	ii) Req. prob				0.3085	0.308537539	9				
13	iii) Req. prob. = $p(55 < x < 65) =$				0.3829						
14					0.38292492	3					
15	Second part										
	i) Req. No. = N*p(x≥62)=					420.7402906					
	ii) Req. No. = N*p(x≤70)=				841	841.344746	1				
18	iii) Req. No. = $N*p(58 < x < 68) =$				367						
19					367.404310	9					
20											
21				Name:Koyal Kc							
22			Roll No:16								
23											