

```

#include<stdio.h>
#include<math.h>
float g(float x);
int main()
{
float f,a,b,h,sum,pi;
int n,i,r;
pi=4*atan(1);
a=pi/18;
b=5*pi/18;
printf("enter the number of ordinates \n");
scanf("%d",&n);
h=(b-a)/(n-1);
sum=0.;
for(i=0;i<=n-2;i=i+2)
{
sum=sum+(h/3.)*(g(a+i*h)+4*g(a+(i+1)*h)+g(a+(i+2)*h));
}
printf("the value of the integral correct up to 5D places = %7.5f",sum);
return(0);
}
float g(float x)
{
float f,y;
int r;
r=0;
f=(1+r)/20.;
y=1/(1+pow(f*pow(sin(x),4),1/2));
return(y);
}

```

\\output\\

enter the number of ordinates

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the value of the integral correct up to 5D places = 0.34907