1.

#include<iostream>

#include<math.h>

#define fx(x) 1/(3+2\*x)

using namespace std;

int main()

{

float a, b, ans=0.0, h;

int n;

cout<<"Enter lower limit of integration(a): ";

cin>>a;

cout<<"Enter upper limit of integration(b): ";

cin>>b;

cout<<"Enter the step size(h): ";

cin>>h;

n = (b - a)/h;

ans = fx(a) + fx(b);

for(int i=1; i<= n-1; i++)

{

int k = a + i\*h;

ans = ans + 2 \* (fx(k));

}

ans = ans \* h/2;

cout<<"\nValue of integration is: "<<ans<<endl;

return 0;

}

2.

#include<iostream>

#include<math.h>

#define f(x) 1/(3+2\*x)

using namespace std;

int main()

{

float a, b, ans=0.0, h;

int n;

cout<<"Enter lower limit of integration: ";

cin>>a;

cout<<"Enter upper limit of integration: ";

cin>>b;

cout<<"Enter the step size(h): ";

cin>>h;

n = (b - a)/h;

ans = f(a) + f(b);

for(int i=1; i<= n-1; i++)

{

int k = a + i\*h;

if(i%2==0) ans = ans + 2 \* (f(k));

else ans = ans + 4 \* (f(k));

}

ans = ans \* h/3;

cout<<"\nValue of integration is: "<< ans;

return 0;

}