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Practice Set-1

```
//1. Calculate area of circle
#include<iostream>
using namespace std;
int main()
{
	float r,a;
	cout<<"Enter radius of circle: ";
	cin>>r;
	a = 3.14*r*r;
	cout<<"\nArea of circle = "<<a;
}
```

Output - Enter radius of circle: 5.3

Area of circle = 88.2026

```
//2.Calculate circumference of circle
#include<iostream>
using namespace std;
int main()
{
	float r,c;
	cout<<"Enter radius of circle: ";
	cin>>r;
   c = 2*3.14*r;
	cout<<"\nCircumference of circle = "<<c;
}
```

Output - Enter radius of circle: 34

Circumference of circle = 213.52

```
//3. Calculate area of reactangle
#include<iostream>
using namespace std;
int main()
{
	float l,w,a;
	cout<<"Enter lenght of rectangle: ";
	cin>>l;
	cout<<"\nEnter width of rectangle: ";
	cin>>w;
	a = l*w;
```

```
	cout<<"\nArea of rectangle = "<<a;
}
```

Output - Enter lenght of rectangle: 15

Enter width of rectangle: 4

Area of rectangle = 60

```
//4.Claculate volume of sphere
#include<iostream>
using namespace std;
int main()
{
	float r,v;
	cout<<"Enter radius of sphere: ";
	cin>>r;
	v = 1.33*3.14*r*r*r;
	cout<<"\nVolume of sphere = "<<v;
}
```

Output - Enter radius of sphere: 5

Volume of sphere = 522.025

```
//5. Calculate surface area of sphere
#include<iostream>
using namespace std;
int main()
{
	float r,sa;
	cout<<"Enter radius of sphere: ";
	cin>>r;
	sa = 4*3.14*r*r;
	cout<<"\nSurface area of sphere = "<<sa;
}
```

Output -Enter radius of sphere: 14.5

Surface area of sphere = 2640.74

```
//6.calculate area of square
#include<iostream>
using namespace std;
int main()
{
	float s,a;
	cout<<"Enter side length of square: ";
```

```
        cin>>s;
        a = s*s;
        cout<<"\nArea of square = "<<a;
}
```
Output -Enter side length of square: 7.4

Area of square = 54.76

```
//7.Find area of right angle triangle
#include<iostream>
using namespace std;
int main()
{
        float b,h,a;
        cout<<"Enter base: ";
        cin>>b;
        cout<<"Enter height: ";
        cin>>h;
        a = 0.5*b*h;
        cout<<"\nArea of right-angled triangle = "<<a;
}
```
Output - Enter base: 3
Enter height: 1.42

Area of right-angled triangle = 2.13

```
//8.Find area of equilateral triangle
#include<iostream>
#include<math.h>
using namespace std;
int main()
{
        float s,a;
        cout<<"Enter side length of an equilateral triangle: ";
        cin>>s;
        a=(sqrt(3)/4)*s*s;
        cout<<"\nArea of equilateral triangle = "<<a;
}
```

Output - Enter side length of an equilateral triangle: 7

Area of equilateral triangle = 21.2176

```
//9. Calculate perimeter of rectangle
#include<iostream>
using namespace std;
int main()
```

```
{
	float l,w,p;
	cout<<"Enter lenght of rectangle: ";
	cin>>l;
	cout<<"\nEnter width of rectangle: ";
	cin>>w;
	p = 2*l+2*w;
	cout<<"\nPerimeter of rectangle = "<<p;
}
```

Output - Enter lenght of rectangle: 4

Enter width of rectangle: 8

Perimeter of rectangle = 24

```
//10. Calculate area of triangle
#include<iostream>
using namespace std;
int main()
{
	float b,h,a;
	cout<<"Enter base: ";
	cin>>b;
	cout<<"Enter height: ";
	cin>>h;
	a = 0.5*b*h;
	cout<<"\nArea of triangle = "<<a;
}
```

Output - Enter base: 20
Enter height: 12

Area of triangle = 120

```
//11. Calculate simple interest
#include<iostream>
using namespace std;
int main()
{
	float p,r,t,si;
	cout<<"Enter principal amount: ";
	cin>>p;
	cout<<"\nEnter rate of interest: ";
	cin>>r;
	cout<<"\nEnter time period: ";
	cin>>t;
   si = p*r*t;
```

```
        cout<<"\nSimple Interest = "<<si;
}
```

Output - Enter principal amount: 50000

Enter rate of interest: 3.5

Enter time period: 3

Simple Interest = 525000

```
//12. Find compound interest
#include<iostream>
#include<math.h>
using namespace std;
int main()
{
        double p,r,t,amount,ci;
        cout<<"Enter principal amount: ";
        cin>>p;
        cout<<"\nEnter rate of interest: ";
        cin>>r;
        cout<<"\nEnter time period: ";
        cin>>t;
        amount = p*((pow((1+r/100),t)));
   ci = amount - p;
        cout<<"\nAmount = "<<amount;
        cout<<"\nCompound Interest = "<<ci;
}
```

Output - Enter principal amount: 10000

Enter rate of interest: 5

Enter time period: 2

Amount = 11025
Compound Interest = 1025