

Given the three numbers a(=8), b(=4),c and constant value PI=3.1415, calculate and display the following result using macros (preprocessor directives)

a) $c = PI * \text{mult}(a,b)$ //the macro $\text{mult}(a,b)$ perform the multiplication of a & b ($a*b$)

b) $c = PI * \text{sum}(a,b)$ //the macro $\text{sum}(a,b)$ perform the sum of a & b ($a+b$)

c) $c = PI * \text{sub}(a,b)$ //the macro $\text{sub}(a,b)$ perform the subtraction of a & b ($a-b$)

d) $c = PI * \text{div}(a,b)$ //the macro $\text{div}(a,b)$ perform the division of a & b (a/b)

```
#include<stdio.h>//a
#include<conio.h>
#define PI 3.1415
#define mult(x,y)(x*y)
int main()
{
    int a=8,b=4;
    float c;
    c=PI*(mult(a,b));
    printf("%f",c);
    return 0;
}
```

```
#include<stdio.h>//b
#include<conio.h>
#define PI 3.1415
#define sum(x,y)(x+y)
int main()
{
    int a=8,b=4;
    float c;
    c=PI*sum(a,b);
    printf("%f",c);
    return 0;
}
```

```
#include<stdio.h>//c
#include<conio.h>
#define PI 3.1415
#define sub(x,y)(x-y)
int main()
{
    int a=8,b=4;
```

```
float c;  
c=PI*sub(a,b);  
printf("%f",c);  
return 0;  
}
```

```
#include<stdio.h> //d  
#include<conio.h>  
#define PI 3.1415  
#define div(x,y)(x/y)  
int main()  
{  
    int a=8,b=4;  
    float c;  
    c=PI*div(a,b);  
    printf("%f",c);  
    return 0;  
}
```