

1. The following C statements are part of a C program. Write down the output. [13]

```
a. int a=3,b=2,c;
    b *=(a++)+2;
    c=b/++a*b/b*25/b;
    printf("a=%d and b=%d\n",a,b);
    printf("c=%d\n",c);
```

```
b. int i=1,j=-2,k=0,m;

    if((!i || --j && k++) || (i++ || j++ && !k++))
        m=i+j+k;
    printf("i=%d j=%d k=%d m=%d\n",i,j,k,m);
```

```
c.
    int i=-2,j=-2,k=0;
    while(i+j<k)
    {
        if(i%2==0)
            i +=2;
        else
            j +=2;
        if(k%2==0)
        {
            k++;
            continue;
        }
        k -=2;
    }
    printf("i=%d j=%d k=%d\n",i,j,k);
```

```

d. int i,j,k=7;
   for(i=2,j=0;i+j<k;i++)
       {
           j +=i++;
           k++;
       }

   printf("i=%d  j=%d  k=%d\n",i,j,k);

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```

2. The following program calculates the area of a triangle ABC in a two-dimensional plane. Here a,b,c are the lengths of the sides, s is semi-perimeter and A is the area of the triangle. Complete the program by inserting suitable statments after the comments. [7]

```

#include<stdio.h>
#include<math.h>
int main()
{
double a,b,c,s,A;
//Read a,b,c from keyboard

//If the triangle is invalid, then stop with appropriate message


//Calculate the area of the triangle


//Print the area of the triangle using two decimal places


return 0;
}

```