Q1. Given the following recursion function, what does power(a,4) return? Also, illustrate your answer using stack.

```
static int power(int a, int n) {
if (n == 0) return 1;
else return a*power(a,n-1);}
```

Q2. Given the following recursion function, what does mystery(5) return? Also, illustrate your answer using stack.

```
public int mystery(int b)
{
  if(b==0)
  return 0;
  if(b % 2)==0)
  return mystery(b-1) + 3;
  else
  return mystery (b-1) + 2;
}
```