

7. The following questions deal with this array and a binary search algorithm.

```
int[] array = { 1, 3, 7, 10, 13, 16, 19, 22, 25 };
```

Which is the first value (value, not index) checked when a binary search algorithm is used to search this array for 12?

What is the second value checked?

What is the third value checked?

What is the fourth value checked?

What is the final result returned?

8. Write a recursive method that adds all the integers from 1 up to the integer sent in (assume the parameter is greater than 1). So sending in 3 returns 6 (1 + 2 + 3) and sending in 4 returns 10.

```
public static int addEmUp(int n)
{

}

}
```

9. Write a recursive method that adds all the integers divisible by 3 from 3 up to the integer sent in (assume the parameter is greater than 3). So sending in 6 returns 9 (3 + 6) and sending in 17 returns 45 (3 + 6 + 9 + 12 + 15)

```
public static int iHeart3s(int n)
{

}

}
```

10. How many times will this code print "Hi" if you call sayHi(5) ?

```
public static void sayHi(int n)
{
    if(n>3) sayHi(n-1);
    System.out.println("Hi");
}
```