

1

What is the result type of `getRoom(4).getGuest()`;

```
public class Guest {
    private String name;
    public String getName() { return name;}
}
public class Room {
    private int number;
    public Guest getGuest() { return guest;}
}
public class Hotel {
    public Room getRoom(int number) { // body of getRoom}
}
```

- a. String
- b. Guest

- c. Room
- d. int

# 2

## What is a good specification for the constructor?

```
public class Point {  
    private int x;  
    private int y;  
  
    public Point(int n, int m) {  
        x = n;  
        y = m;  
    }  
    public int getX() { return x; }  
    public int getY() { return y; }  
}
```

a. requires  $x == 0 \ \&\& \ y == 0$ ;

b. requires  $x < n \ \&\& \ y < m$ ;

c. ensures  $x == n \ \&\& \ y == m$ ;

d. ensures  $x < n \ \&\& \ y < m$ ;

# 3

## What is the return value of *foo*?

```
public int foo(int n) {  
    int x = 568;  
    x = (x++) + n;  
    return x;  
}
```

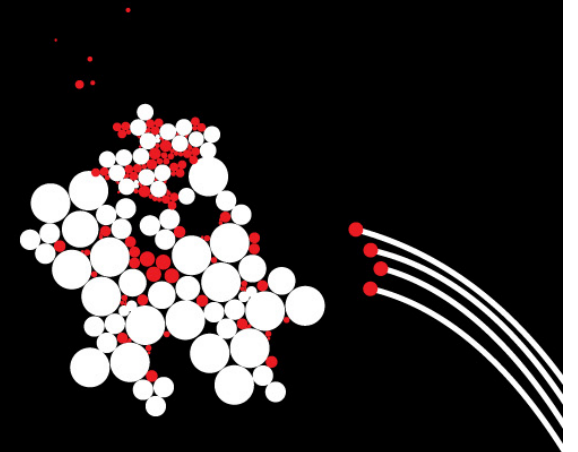
a. 568

b. 569 + n

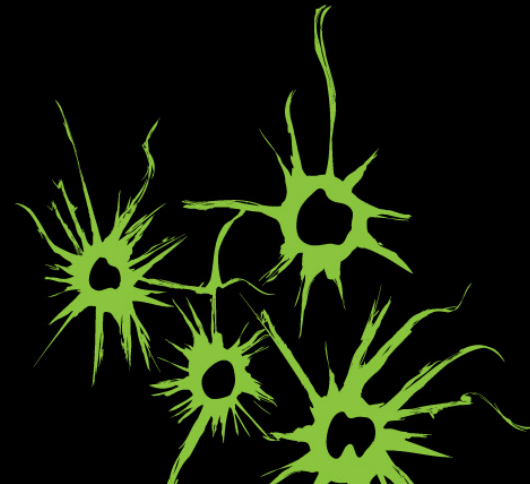
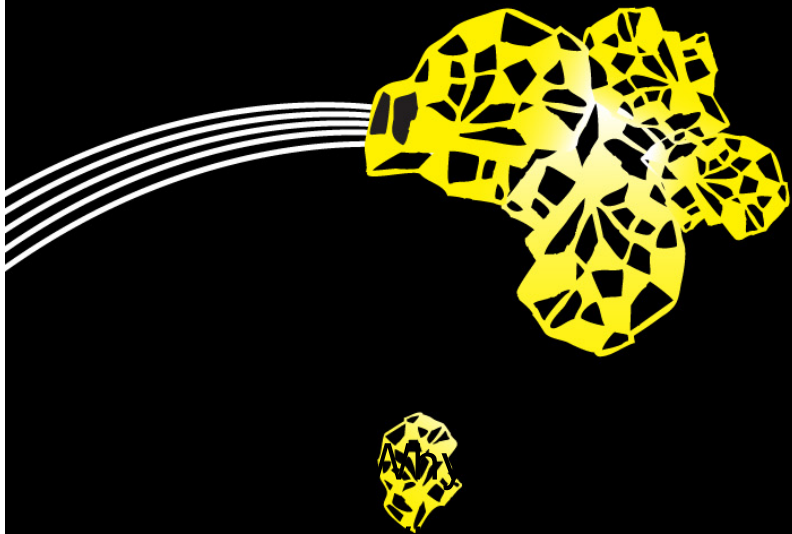
c. 568 + n

d. n

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**LAST MAN STANDING**  
DIAGNOSTIC TEST 1



# RULES OF THE GAME

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- You have received an email with a link to the diagnostic test site
- Initially everybody is standing
- Answer the question within 45 seconds by selecting an answer option on your screen
- If you answer the question correctly, you remain standing
- If you answer wrong, you sit down, **but you keep on answering questions**
- If there is only 1 person standing, we have a **winner**
- If we have a winner, or if all participants answered wrong, we start with the complete group again.
- There are prizes for the winners, and for the best overall scores