This quiz is to be taken by yourself with closed books, closed notes, no electronic devices.

What is the output produced by the following program? (Hint: draw stack frames)

```java
public class Mystery {
    public static void main( String[] args )
    {
        Mystery ref = new Mystery();
        System.out.println( ref.mystery( 10 ) );
    }
    private int mystery( int a )
    {
        int b = a + 5;
        if ( b >= 10 )
        {
            System.out.println( a );
            b = a + mystery( a - 2 );
            System.out.println( b );
        }
        else
        {
            System.out.println( "Yield!" );
            b = a + 2;
            System.out.println( a );
        }
        return b;
    }
}
```

Output
Given the following array declaration:
```java
int[] a = { 1, 3, 5, 7, 9 };
```

Fill in the blanks to print out each element:
```java
_________ ( int i = ___________ ; i < ___________ ; ___________ )

System.out.println( ___________ );
```

Now do the same using a foreach loop:
```java
_________ ( int i ___________ ___________ )

System.out.println( ___________ );
```

Indicate whether each of the following parts of a Java program is (A-H) and where in the Java Runtime Environment each part lives (1-3)

<table>
<thead>
<tr>
<th>Java program part</th>
<th>Java Runtime area</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) Class (static) variable</td>
<td>1) The Class Area</td>
</tr>
<tr>
<td>B) Instance variable</td>
<td>2) The Heap</td>
</tr>
<tr>
<td>C) Static method</td>
<td>3) Stack Frame in the Runtime Stack</td>
</tr>
<tr>
<td>D) Instance method</td>
<td></td>
</tr>
<tr>
<td>E) Local variable</td>
<td></td>
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<tr>
<td>F) Formal Parameter</td>
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<tr>
<td>G) Constructor</td>
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<tr>
<td>H) Class definition</td>
<td></td>
</tr>
</tbody>
</table>

```java
public class F10
{
    private char actor;
    public F10() {}
    public void setActor( char ch ) { actor = ch; }
    public static int cling;
}

public class SomeOtherClass
{
    private int cling;
    public static void main( String[] args )
    {
        char toon = '?';
        F10 ref1;
        ref1 = new F10();
        SomeOtherClass ref2 = new SomeOtherClass();
        // Other Code ... possibly changes the value in toon
        ...

        public char fubar( char tester ) { ... }
    }
}
```