

Name _____ Period _____

Skill 26.3 Exercise 1

Complete the stack diagram for the code block shown

```
class Main {
```

```
    public static void main(String[] args) {  
        Recursion.reduceByOne(4);  
    }  
}
```

```
class Recursion{
```

```
    public static void reduceByOne(int n){  
        if(n > 0){  
            reduceByOne(n-1);  
        }  
    }  
}
```

Stack

Skill 26.4 Exercise 1

Complete the stack diagram for the code block shown, then indicate the output.

```
class Main {
```

```
    public static void main(String[] args) {  
        System.out.println(Recursion.pls(4));  
    }  
}
```

```
class Recursion{
```

```
    public static int pls(int n)  
    {  
        if (n == 0)  
            return 5;  
        else if (n == 1)  
            return 11;  
        else  
            return pls(n - 1) + 2 * pls(n - 2);  
    }  
}
```

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[illegible]

Skill 26.4 Exercise 2

Complete the stack diagram for the code block shown, then indicate the output.

	Stack	Output
<pre>class Main { public static void main(String[] args) { Recursion.homer(9)); } } class Recursion{ public static void homer(int n) { if (n <= 1) System.out.print(n); else homer(n / 2); System.out.print(", " + n); } }</pre>		

AP Computer Science A
Ticket Out the Door
Set 26: Recursion

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