

Recursion

Find the output to the following code segments. Use the recursive boxes shown on page 3 of the lesson to help you obtain the final result.

1.

```
int result = identity(10);
System.out.println("The final answer is " + result);

public int identity(int num)
{
    if (num < 1)
        return 10;
    else
        return num + identity(num - 2);
}
```
2.

```
int result2 = negative(-3);
System.out.println("The final answer is " + result2);

public int negative(int num)
{
    if (num >= 20)
        return -5;
    else
        return negative(num + 4) + 2 * num;
}
```
3.

```
int result3 = product(1);
System.out.println("The final answer is " + result3);

public int product(int num)
{
    if (num > 20)
        return -1;
    else
        return num * product(-2 * num);
}
```