[30 points]

1. (3 points) immutable

2. a. (3 points) shallow

b. (3 points) deep

3. [11 points]

public static String concatenator(String[][] a) { [2 points]

String result = ""; [1 point]

for (int i = 0; i < a.length; i++) { [2 points]

for (int j = 0; j < a[i].length; j++) { [2 points]

result += a[i][j]; [3 points]

}

}

return result; [1 point]

}

4. [10 points]

int[] x = new int[a.length \* 2]; // 3 points -- check size!

for (int i =0; i < a.length; i++) { // 2 points for a sensible loop

x[2 \* i] = a[i]; // 2 points

x[2 \* i + 1] = a[i]; // 2 points

}

return x; // 1 point