Java   Name -
Tracing Two Dimensional Arrays worksheet #1   Period -

scores

Trace the code below and show the output that displays.

```java
final int NUM_ROWS = 3;
final int NUM_COLS = 2;
int[][] scores = {{100, 200}, {200, 300}, {100, 100}};

// 1.
```

	0	1
0		
1		
2		

```java
int sum = 0, rowSum = 0;                              row   col   sum   rowSum   ave   rowAves
double[] rowAves = new double[3];
double ave = 0.0;
```

0	1	2

```java
for (int row = 0; row < NUM_ROWS; row++)
{
   for (int col = 0; col < NUM_COLS; col++)
   {
      rowSum += scores[row][col];
      sum += scores[row][col];
   }

   rowAves[row] = (double) rowSum / 2;
   rowSum = 0;
}

ave = (double) sum / (scores[0].length * scores.length);
for (int i = 0; i < rowAves.length; i++)
   System.out.println(rowAves[i]);


// 2.

int max = Integer.MIN_VALUE;                  max   rowPosOfMax   colPosOfMax   row   col
int rowPosOfMax = 0;
int colPosOfMax = 0;

for (int row = 0; row < scores.length; row++)
{
   for (int col = 0; col < scores[0].length; col++)
   {
      if (scores[row][col] > max)
      {
            max = scores[row][col];
            rowPosOfMax = row;
            colPosOfMax = col;
      }
   }
}

System.out.println("max = " + max + " (" + rowPosOfMax + ", " + colPosOfMax + ")");
```