Java
Tracing Two Dimensional Arrays worksheet #2

Name -
Period -

CAREFULLY & FULLY trace the code below and show the output that displays.

scores


```
int[][] scores = {{100, 200}, {200, 300}, {100, 50}};

// 1.

int sum = 0;                                    row   col   sum   aves
double[] aves = new double[2];

for (int col = 0; col < scores[col].length; col++)
{
   for (int row = 0; row < scores.length; row++)
   {
      sum += scores[row][col];
   }

   aves[col] = sum / scores.length;
   sum = 0;
}

for (int i = 0; i < aves.length; i++)
   System.out.println(aves[i]);
```

// What is displayed?

```
// 2.

int min = Integer.MAX_VALUE;                                    min   row   col

for (int row = 1; row < scores.length; row++)
   for (int col = 0; col < scores[0].length - 1; col++)
      if (scores[row][col] < min)
            min = scores[row][col];

System.out.println("min = " + min);
```

// What is displayed?

```
// 3.                                                                  row    col    i
int[][] numbers = {{1, 0}, {4, 1}, {2, 3}, {1, 4}};
int[] frequencies = new int[5];

for (int row = 0; row < numbers.length; row++)
   for (int col = 0; col < numbers[row].length; col++)
      frequencies[numbers[row][col]]++;


for (int i = 0; i < frequencies.length; i++)
   System.out.print(frequencies[i] + " ");
```

// What is displayed?

```
//draw numbers & frequencies arrays here
```