**Name:**

**Step # 1 – Create the matrix below. No computers.**

**public** **class** MatrixProblem2 {

 **public** **static** **void** main(String[] args) {

 **int** nums[][] = {

 {5,8,7,6,2},

 {1,2,7,5,7},

 {9,2,3,4,2} };

 **for**(**int** c= 0; c < nums.length;c++)

 **for**(**int** r = c; r >=0; r--)

 nums[r][c] = nums[(r+c) % nums.length] [(**int**)(Math.*abs*(c-r))];

 }

Use the table below to help solve the problem:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| C | R | R + C % 3 | Abs(c-r) | nums[r][c] =  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**Step # 2 - Fill in the state of the 2D array here:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**Step # 3 - Bring to Mr. Dixon the following code, based on the state of the 2D array after the code has run.**

nums[1][4], nums[2][3], nums[1][2], nums[0][1]

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |

Show your work.