NAME _____

(1) (*6 points*) The code below uses a method called `hasNegative()`; write that method below. The method must takes an array of integers as input, and return `true` if there is any negative number in the array; if the array is empty, or no negative values exist, it should return `false`. Thus, when the code below is run, we will see output as follows:

```
Array has negative values: true.
Array has negative values: false.
```

```
int[] input = { 5, 2, -3, 4, 5 };
boolean neg = hasNegative( input );
System.out.println( "Array has negative values: " + neg );

input = new int[0];  // empty array
neg = hasNegative( input );
System.out.println( "Array has negative values: " + neg );
```

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(2) (*6 pts.*) Write a method that creates a 2-dimensional array of integers, and then uses two loops, one nested inside the other, to fill that array with the first 10 multiples of the numbers 1 to 5. Specifically, your code should fill the array with the numbers as follows, row by row:

```
1  2  3  4  5  6  7  8  9 10
2  4  6  8 10 12 14 16 18 20
3  6  9 12 15 18 21 24 27 30
4  8 12 16 20 24 28 32 36 40
5 10 15 20 25 30 35 40 45 50
```

When the method is complete, it should **return** the array.

Note: the method ***does not*** need to print out anything; rather, it should fill the array with the values shown, row-by-row, and column-by-column, before returning that array.