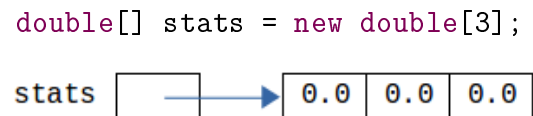
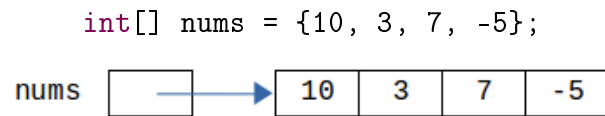


Model 1 Array Diagrams

Array elements are stored together in one contiguous block of memory. To show arrays in memory diagrams, we simply draw adjacent boxes.



Questions (15 min)

Start time:

1. What is the default value for array elements?
2. Draw a memory diagram for the following arrays. (*Hint: You should have no empty boxes.*)
 - a) `int[] sizes = new int[5];`
`sizes[2] = 7;`
 - b) `double[] costs = new double[4];`
`costs[0] = 0.99;`
 - c) `String[] names = {"Anita"};`
3. Like strings, arrays are reference types. What is the *value* of an array variable?
4. Does the statement `int[] copy = nums;` create a new array? Justify your answer.
5. Draw a memory diagram of the following array. (*Hint: You should have four arrows.*)
`String[] greek = {"alpha", "beta", "gamma"};`