

Will T - Chapter 9 CRT Questions

1. An index of 2 because the first element has an index of 0

2. `int [] quantities = new int [20];`

3. `double [] heights = {1.65, 2.15, 4.95};`

4.

```
for (int y = 0; y < grades.length - 1; y++) {  
    System.out.println(grades[y]);  
}
```

5.

a)

```
for (int y = 0; y < grades.length - 1; y++) {  
    int grade = grades.get(y);  
    grades.set(n+1, grade);  
}
```

b)

```
for (int y = 0; y < grades.length; y++) {  
    int grade = grades.get(y);  
    grades.set(n-1, grade);  
}
```

6. If you are passing a single element of an array it counts as whatever data type that element is (string, int, double, etc.) whereas if you are passing the whole array it will count as an array data type.

7. The array index is an offset from the distance of the start of the array, this is because zero is the lowest unsigned integer value, -1 tells you that the index is out of bound.

8. The output will be 'i' because it is printing the character at an index of 3 which is the fourth element in the string, the fourth letter being 'i'. It works this way because of zero-based numbering.

Index	0	1	2	3
Element	1	2	3	4