Question 1. Short Answer Questions   (60 points)

Fill in the box with the answer.

- Removed in publishable version –

Question 2. Coding 1   (20 points)

Complete the overridden method void addLast(T item).

It is a method of the class DelimitedARDeque, a subclass of an iterable ARDeque.

It adds an item at the back of the object of DelimitedARDeque,

but it will throw an IllegalArgumentException if the item already occurs in it more than once.

Test case:

```
DelimitedARDeque<String> dd = new DelimitedARDeque<>();
dd.addLast("a");
dd.addLast("b");
try {
    dd.addLast("a");
    dd.printDeque();
} catch (IllegalArgumentException e) {
    System.out.println("AddLast failed");
}                                          →  AddLast failed
```

Question 3. Coding 2   (20 points)

Complete the method `boolean equals(Object that)` of an iterable ARDeque that overrides the one in `Object`.

To be the same, they must be of the same size, and must share at most 2 different items at the same position.

Suppose [] is an ARDeque<Integer>. Then:

`[1, 2, 3, 4].equals([1, 2, 5, 6])`   →   true

`[1, 2, 3, 4].equals([1, 4, 2, 3])`   →   false