Name : _____   **Date : _____**

A+ Queues Worksheet 2 – Priority Queues

Show the output of each block of code below.

1. What is the output?

```
Queue<Integer> a = new PriorityQueue<Integer>();
a.add(45);
a.add(76);
a.add(34);
out.println(a);
out.println(a.remove());
```

2. What is the output?

```
Queue<Integer> b = new PriorityQueue<Integer>();
b.add(45);
b.remove();
b.add(34);
out.println(b);
out.println(b.remove());
```

3. What is the output?

```
Queue<Integer> c = new PriorityQueue<Integer>();
c.add(45);
out.println(c.peek());
c.add(34);
out.println(c.remove());
c.add(67);
out.println(c);
```

4. What is the output?

```
Queue<Double> d = new PriorityQueue<Double>();
d.add(9.2);
d.add(1.1);
d.add(7.3);
d.add(5.6);
out.println(d.remove());
```

5. What is the output?

```
Queue<String> e = new PriorityQueue<String>();
e.add("ab");
e.add("78");
e.add("ET");
out.println(e.remove());
e.add("one");
out.println(e.remove());
out.println(e.size());
out.println(e.remove());
```

6. What is the output?

```
Queue<String> f = new PriorityQueue<String>();
f.add("it");
f.add("go");
f.add("we");
f.add("by");
while(!f.isEmpty()) {
   System.out.println(f.remove());
}
```