

Question Q3: Chapter 3 Concepts <8 marks>

Q3-1. [8 marks] Suppose the application Question3App below has been compiled without error and has been invoked. (The API for the classes used by this app can be found in the midterm appendix.) Draw a memory diagram to reflect the contents of memory up to and including line 7.

```

1 import type.lib.Rectangle;
2
3 public class Question3App {
4     public static void main(String[] args) {
5         int width = 50;
6         int height = 100;
7         Rectangle rect1 = new Rectangle(width, height);
8         Rectangle rect2 = new Rectangle(width, height);
9         boolean test1 = rect1 == rect2;
10        boolean test2 = rect1.equals(rect2);
11        rect1.setHeight(150);
12        System.out.println(rect1.getArea());
13    }
14 }

```

