

```
1 BetterRectangle class:
2
3 extends to Rectangle class (java.awt.Rectangle)
4
5 has 4 constructors
6     1. no input - call super() then set width and height to 1 and origin to 0,0
7     2. width and height - super() then set width and height and origin
8     3. x and y and width and height - super() then set values
9     4. another BetterRectangle - super() then copy values over
10
11 2 override methods
12     toString()
13     equals()
14
15 4 Accessors
16     int - getArea()
17     int - getPerimeter()
18     float - getSlope (height/width) [2 decimal places]
19     Point - getMidPoint, from center to anchor, rounded up to int value
20
21 4 utility methods
22     congruent(other) width+height is same
23     equivalent(other) perimeter is same
24     similar(other) area is same
25     concentric(other) midpoint is same
26
27 1 mutator
28     boolean scaleBy(scale) new height and width is old ones multiplied by scale
29     return true after done, false if scale is non-positive (negative or 0)
30
31
32 Tester class:
33
34 main class that will:
35
36 create 4 "better" rectangles
37 test the accessor methods with rectangle 1
38 test the utility and equals() methods with rectangle 1 and 2
39 test the mutator method with 4
40
41 and print expected output with all
42
43
44
45
```