

```
1  /**
2   * A Square is a Shape that maintains information about its side length.
3   * A Square knows how to return and set its side length, calculate and
4   * return its area, perimeter, and diagonal length.
5   *
6   * @author    Josh Ibad
7   * @author    Megan Yang
8   * @teacher    Coglianese
9   * @period    2
10  * @version    23 February 2018
11  **/
12  public class Square extends Rectangle
13  {
14      /**
15       * Constructs a square with initial side length specified by x.
16       * @param x    initial side length
17       **/
18      public Square(double x)
19      {
20          super(x, x);
21      }
22
23      /**
24       * Returns the square's side length
25       * @return    sideLength
26       **/
27      public double getSide()
28      {
29          return getHeight();
30      }
31
32      /**
33       * Sets the side length to the input number.
34       * @param x    assigns x to side lengths
35       **/
36      public void setSide(double x)
37      {
38          setBase(x);
39          setHeight(x);
40      }
41
42  }
```