

Lab – Finding the lengths of 30-60-90 triangles

10 points

Name _____

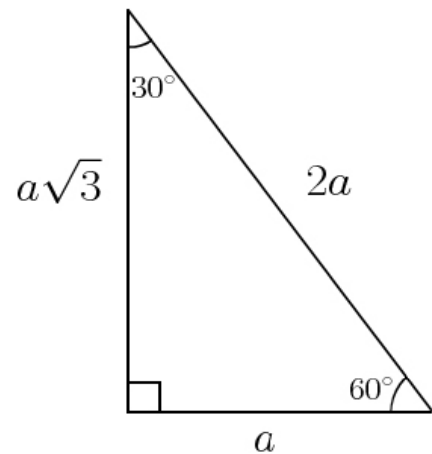
The ratio of the lengths of sides in a 30-60-90 triangle are constant as:

if Base = a ,

Side = $2a$,

Height = $a\sqrt{3}$

That is, if the base of the triangle is ' a ' units, then the height will be ' a ' * $\sqrt{3}$, and long side will be $2 * 'a'$.



Write a Java program that accepts a value for ' a ' from the keyboard and calculates the height and side lengths. The main method is given below. Your program should use the main method as listed.

```
public static void main(String[] args)
{
    // You write the 'getValue()' method...
    double sideA = getValue();

    // You write the 'displaySides' method...
    displaySides(sideA);
}
```

Note you may use the built-in `Math.sqrt()` method to get the square root of 3.0. Refer to the Java API documentation.

Turn in your code listing on paper in class.