

## Triangle Information

**Purpose:** Provides information about a triangle given the lengths of three sides

**Inputs:**

Side a length:

Side b length:

Side c length:

These side lengths produce a valid right triangle

### User Stories

Scenario	Description	Testing Notes
1.	The application needs to validate user input and not allow for non-numbers to be entered.	
2.	As soon as all three fields have valid data in them, it needs to run the calculations to generate the triangle information.	
3.	We'll need to know whether the given values produce a valid triangle  A simple calculation for this is to know that no two sides added up can be less than the other side (EG $3+4 > 5$ , so the above triangle is valid)	
4.	Classify the triangle by side and/or angle <ul style="list-style-type: none"><li>• Scalene (side)</li><li>• Isosceles (side)</li><li>• Equilateral (side)</li><li>• Acute (angle)</li><li>• Obtuse (angle)</li><li>• Right (angle)</li></ul>	
5.	Generate a text message that provides the class of the triangle, and whether it is valid	
6.	<b>(Optional):</b> Provide the angle measurements for the triangle in degrees.	