Algorithms and Classifying Triangles

**Geometry**

**Unit 1 Line Master 7a**

You have written algorithms for completing different daily routines. Let’s take a look at writing algorithms to help us classify triangles according to their side lengths or angle measures.

1. Here is an algorithm for classifying triangles according to their angle measures.

**Algorithm for classifying a triangle according to angle measures**

Measure all three angles.

If one angle is equal to 90 degrees, it’s a right triangle.

If one angle is greater than 90 degrees, it’s an obtuse triangle.

If all three angles are less than 90 degrees, it’s an acute triangle.

Use the algorithm to classify five of these triangles.   
Check if you get the correct answer each time.   
If not, adjust the algorithm as necessary.

Shape, polygon

Description automatically generated

Algorithms and Classifying Triangles  
(cont’d)

**Geometry**

**Unit 1 Line Master 7b**

**Answers:**

A: Right triangle B: Acute triangle

C: Acute triangle D: Obtuse triangle

E: Right triangle F: Right triangle

G: Acute triangle H: Obtuse triangle

I: Obtuse triangle

1. Write an algorithm for classifying a triangle according to   
   side lengths.

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| --- |
| **Algorithm for classifying a triangle according to side lengths** |
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Use your algorithm to classify five of these triangles.   
Check if you get the correct answer each time.   
If not, adjust the algorithm as necessary.

Shape, polygon

Description automatically generated

Algorithms and Classifying Triangles  
(cont’d)

**Geometry**

**Unit 1 Line Master 7c**

**Answers:**

A: Scalene triangle B: Equilateral triangle

C: Isosceles triangle D: Scalene triangle

E: Scalene triangle F: Scalene triangle

G: Equilateral triangle H: Isosceles triangle

I: Scalene triangle