# Lesson One Exit Ticket

Please explain why the Triangle Inequality Theorem is true for all triangles. You may use pictures or diagrams to aid your explanation.

This lesson was: too fast/too slow/just right

Name

# Lesson Two Exit Ticket

Explain how we can classify a triangle as acute, right, or obtuse using  $a^2$ ,  $b^2$ , and  $c^2$ .

Today's lesson was: easy/hard/in the middle

Name

#### Lesson Three Exit Ticket

Why does ASA prove that two triangles are congruent, but SSA does not? Please rate your understanding of this lesson from a scale of 1-4 1 = No idea 2 = I can classify triangles using the 4 theorems (SSS, ASA, SAS, AAS) with some assistance 3 = I can classify triangles using the 4 theorems on my own 4 = I can classify triangles using the 4 theorems and teach someone else how to do it. Name

### Lesson Three

### Puzzlement Problem

Please write one or two sentences answering the prompts about the following scenario. Please turn this paper in at the end of class.

Emely and Levi are building a giant Easter bunny for a theater production that will look something like this:



They are each in charge of making one ear. They both make the angle of the tip of the ear 40°, the base of the ear 10 inches, and one side of the ear 18 inches.



Based on this information, can they be

**certain** that they created identical ears? If not, what additional information might they need?

My answer before the lesson (initial answer): (ex. Emely and Levi can be certain that they created identical ears because...)

My answer after the lesson (final answer):

Assessment Review S24-3: Triangle Theorems

Name: \_\_\_\_\_\_ Period: \_\_ Date: \_\_/\_/\_\_\_

 Can the following values form a triangle? Be sure to write a sentence explaining why or why not. ¿Pueden estos números formar un triángulo? Escribe una oración indicando por qué o por qué no. 21, 14, 7

- 2. What are the minimum and maximum values needed to form a triangle? ¿Cuáles son los valores mínimos y máximos necesarios para formar un triángulo?
  - a = 5
  - b = 9

 What type of triangle is formed with the following values? Explain how you know.
¿Qué tipo de triángulo se forma con los siguientes valores? Explique cómo lo sabe.
15, 15.5, 4 4. State the reason why the following two triangles are congruent. Escribir la razón por la que los dos triángulos son congruentes.



5. Create an acute triangle and prove that it is acute. Crear un triángulo agudo y demostrar que es agudo.

6. Your friend says that the two triangles in the figure below are congruent. How does she know?

Tu amigo dice que los dos triángulos en la figura abajo son congruentes. ¿Cómo lo sabe?