

Name \_\_\_\_\_

Date \_\_\_\_\_

**Law of Sines and the Ambiguous Case - Guided Lesson:**

Complete the following problems:

1) In  $\triangle ABC$ ,  $a = 8$ ,  $c = 17$ , and  $m\angle A = 40^\circ$ . How many distinct triangles can be drawn given these measurements?

2) In  $\triangle ABC$ ,  $a = 12$ ,  $b = 17$ , and  $m\angle A = 20^\circ$ . How many distinct triangles can be drawn given these measurements?

3) In  $\triangle ABC$ ,  $a = 15$ ,  $b = 20$ , and  $m\angle A = 40^\circ$ . How many distinct triangles can be drawn given these measurements?

