DO NOW

GRADE 7 · 5 MINUTES · START RIGHT AWAY

Lesson 8-3c **Draw a Triangle with a Combination of Given Side Lengths and Angle Measures**

Name _____ Date _____ Per _____

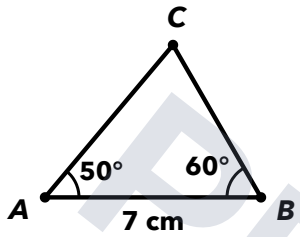
1 FLUENCY

How many triangles fit each set of conditions? Write **one**, **many**, or **none**.

Conditions	Triangles
sides 4 cm, 6 cm, included 50°	
angles 30°, 60°, 90°	
angles 100°, 90°; a 5 cm side	

2 VISUAL MODEL

Triangle *ABC* is drawn from two angles and the side between them.



m∠*C* = ☐

Unique triangle? **Yes** or **No**

3 APPLICATION

Two posts are 40 m apart. From the posts, a tree is sighted at angles of 35° and 75° with the line between them. Sketch it. Find the angle at the tree.

_____

WORK

4 REASONING

Which set of conditions does **NOT** always make exactly one triangle? Explain.

A three side lengths

B two sides and the angle between them

C two angles and the side between them

D three angle measures

_____

*We don't divide our effort, we **multiply** it!*

✎ Show your work ✓ Check your work ★ Try your best

Preview - the full worksheet and its answer key are at primeworksheet.com