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GEOMETRY · 5 MINUTES · START RIGHT AWAY

Lesson 7-3c **Verify Triangle Similarity**

Name _____ Date _____ Per _____

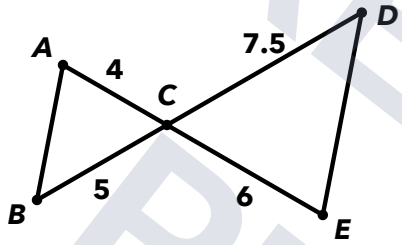
1 FLUENCY

$\triangle ABC$: $AB = 6$, $AC = 9$, $m\angle A = 50°$. $\triangle DEF$: $DE = 8$, $DF = 12$, $m\angle D = 50°$. Are they similar? Which theorem?

$\frac{8}{6} = \frac{\square}{\square}$ $\frac{12}{9} = \frac{\square}{\square}$ **AA ~** **SSS ~** **SAS ~**

2 VISUAL MODEL

Segments AE and BD meet at C. Verify the triangles are similar.



$\frac{CE}{CA} = \square$ $\frac{CD}{CB} = \square$

$\angle ACB \cong \angle ECD$: _____

$\triangle ACB \sim \triangle \square$

3 APPLICATION

A ramp support is a right triangle with legs 3 ft and 4 ft. A second support is a right triangle with legs 4.5 ft and 6 ft. Are the supports similar? Which theorem?

similar? **Yes** or **No** **AA ~** **SSS ~** **SAS ~**

WORK

4 REASONING

Which information is NOT enough to prove two triangles similar?

A 2 pairs of $\angle$s $\cong$

B 3 pairs of sides proportional

C 2 sides proportional + included $\angle$s $\cong$

D 2 sides proportional + non-included $\angle$s $\cong$

*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