Name _____ Date _____

5.3 Puzzle Time

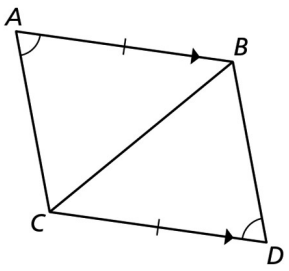
What Do You Call A Stubborn Angle?

Circle the letter of each correct answer in the boxes below. The circled letters will spell out the answer to the riddle.

1. Identify the theorem.

If two sides and the included angle of one triangle are congruent to two sides and the included angle of a second triangle, then the two triangles are congruent.

Use the diagram. Identify the parts that are congruent by the given reason in the proof.



STATEMENTS	REASONS
$\overline{AB} \cong \overline{DC}$	Given
$\overline{AB} \parallel \overline{DC}$	Given
2.	Alternate Interior Angles Theorem
3.	Reflexive Property of Congruence
4.	SAS Congruence Theorem

Use the diagram. Name the included angle between the pair of sides given.

5. $\overline{AC}$ and $\overline{CB}$

6. $\overline{BC}$ and $\overline{CD}$

T	**O**	**H**	**B**	**T**	**M**
$\angle ABC$	$\angle BCD$	$\angle ABC \cong \angle CBD$	$\triangle ABC \cong \triangle DCB$	SAS Congruence	$\triangle ABC \cong \triangle BCD$
U	**A**	**R**	**M**	**S**	**E**
$\angle ACB$	$\angle BDC$	$\overline{AC} \cong \overline{BD}$	AAS Congruence	$\angle ABC \cong \angle DCB$	$\overline{BC} \cong \overline{CB}$