

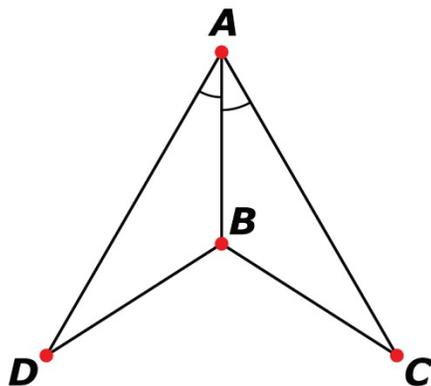
MAT.HS.TE.1.00GCO.O.470

| | |
|--|---|
| Sample Item ID: | MAT.HS.TE.1.00GCO.O.470 |
| Grade: | HS |
| Claim(s): | Claim 1: Concepts and Procedures Students can explain and apply mathematical concepts and interpret and carry out mathematical procedures with precision and fluency. |
| Assessment Target(s): | 1 O: Prove geometric theorems. |
| Content Domain: | Geometry |
| Standard(s): | G-CO.10 |
| Mathematical Practice(s): | 2, 3, 7 |
| DOK: | 2 |
| Item Type: | TE |
| Score Points: | 2 |
| Difficulty: | L |
| Key: | 1. $\angle ABD \cong \angle ABC$ 2. $\overline{AC} \cong \overline{CE}$ |
| Stimulus/Source: | |
| Target-specific attributes (e.g., accessibility issues): | |
| Notes: | TEI Template: Select and Order |

For items 1 and 2, what additional information is required in order to prove the two triangles are congruent using the provided justification?

Use the set of choices in the box below. Select a side or angle and place it in the appropriate region. Only one side or angle can be placed in each region.

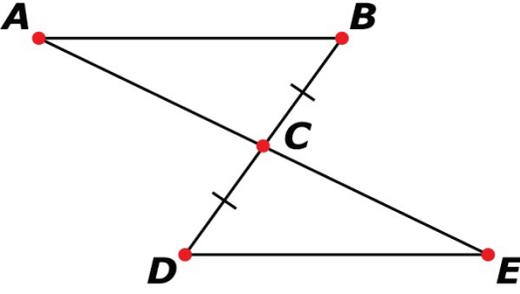
| | | | |
|-----------------|-----------------|-----------------|-----------------|
| \overline{AB} | \overline{AC} | \overline{AD} | \overline{BC} |
| \overline{BD} | \overline{CD} | \overline{CE} | \overline{DE} |
| $\angle ABC$ | $\angle ABD$ | $\angle ACB$ | $\angle ADB$ |
| $\angle BAC$ | $\angle CDE$ | $\angle CED$ | $\angle DCE$ |



ASA Postulate

1.

$$\boxed{\phantom{\text{side or angle}}} \cong \boxed{\phantom{\text{side or angle}}}$$



2. SAS Theorem \cong

Key for Multi-part Items:

Each item is scored independently, and will receive 1 point.

Key

1. $\angle ABD \cong \angle ABC$
2. $\overline{AC} \cong \overline{CE}$

TE Information

Item code: MAT.HS.TE.1.00GCO.O.270

TEI Template: Select and Order

Interaction Space Parameters:

A. *The image containing the pair of blank regions separated by the congruent symbol \cong :*

[1] ASA Postulate $\langle \text{blank} \rangle \cong \langle \text{blank} \rangle$

[2] SAS Theorem $\langle \text{blank} \rangle \cong \langle \text{blank} \rangle$

B. *The images for the digital content objects:*

The following 8 sides and 8 angles in the lower box:

$\overline{AB}, \overline{AC}, \overline{AD}, \overline{BC}, \overline{BD}, \overline{CD}, \overline{CE}, \overline{DE}$

$\angle ABC, \angle ABD, \angle ACB, \angle ADB, \angle BAC, \angle CDE, \angle CED, \angle DCE$

Scoring Data:

Key

1. $\angle ABD, \angle ABC$
2. $\overline{AC}, \overline{CE}$

Answer both items correctly $\{1, 2\} = 2$

One correct item $\{1\}$ or $\{2\} = 1$

No correct item = 0