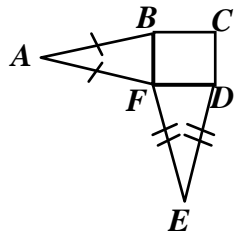


NAME: _____

P.I. G.G.28: Determine the congruence of two triangles by using one of the five congruence techniques (SSS, SAS, ASA, AAS, HL), given sufficient information about the sides and/or angles of two congruent triangles

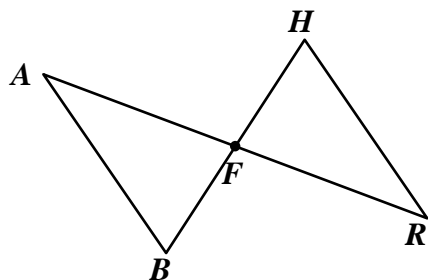
1. $BCDF$ is a square. What additional information do you need to prove $\triangle ABF \cong \triangle EDF$ using ASA?



- I. $\angle ABF \cong \angle EDF$ II. $\overline{AB} \cong \overline{ED}$ III. $\overline{BF} \cong \overline{FD}$ IV. $\angle A \cong \angle E$

- [A] III only [B] II only [C] I, II, or IV [D] I only [E] III and IV

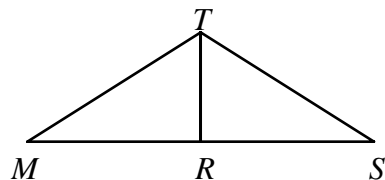
2. Given that \overline{AR} and \overline{BH} bisect each other at F , which of the following would you use to prove $\triangle AFB \cong \triangle RFH$?



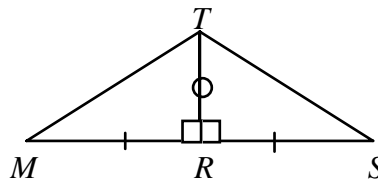
- [A] SSS [B] AAS [C] ASA [D] HL [E] SAS

3. Given: R is the midpoint of \overline{MS}
 $\overline{TR} \perp \overline{MS}$

If you outlined a proof that shows $\overline{TM} \cong \overline{TS}$, which would NOT be used?

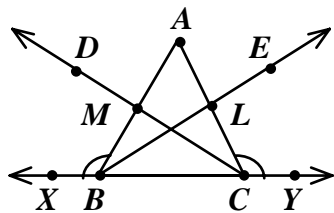


- [A] $\triangle TMR \cong \triangle TSR$ by the ASA congruency postulate
[B] $\triangle TMR \cong \triangle TSR$ by the SAS congruency postulate
[C] $\overline{TM} \cong \overline{TS}$ by CPCTC [D]



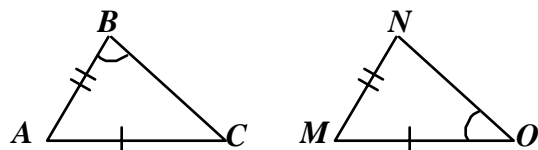
NAME: _____

4. \overrightarrow{BE} is the angle bisector of $\angle ABC$ and \overrightarrow{CD} is the angle bisector of $\angle ACB$. Also, $\angle XBA \cong \angle YCA$. Which of the following would you use to prove $\overline{BL} \cong \overline{CM}$?



- [A] AAS [B] SSS [C] ASA [D] SAS [E] HL

5. Compare the quantity in Column A with the quantity in Column B.



Column A

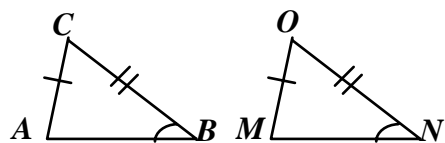
Column B

BC

NO

- [A] The quantity in Column A is greater. [B] The quantity in Column B is greater.
[C] The two quantities are equal.
[D] The relationship cannot be determined on the basis of the information supplied.

6. Compare the quantity in Column A with the quantity in Column B.



Column A

Column B

AB

MN

- [A] The quantity in Column A is greater. [B] The quantity in Column B is greater.
[C] The two quantities are equal.
[D] The relationship cannot be determined from the information supplied.

[1] C

[2] E

[3] A

[4] C

[5] D

[6] D