Date _____ Geometry

Congruent Triangle Methods

- 1. In the diagram below of \triangle DEL and \triangle RAY, $\angle D \cong \angle R$, $\angle E \cong \angle A$, and $\overline{EL} \cong \overline{AY}$ Which of the follow could be used to prove that $\triangle DEL \cong \triangle RAY$?
- $(1) ASA \qquad (3) AAS$
- (2) AA (4) SAS



2. In the diagram below of \triangle TIM and \triangle BER, $\angle T$ and $\angle B$ are right angles, $IM \cong ER$, and $\overline{TM} \cong \overline{BR}$ Which of the follow could be used to prove that $\triangle TIM \cong \triangle BER$? $I_{A} = \mathbf{E}_{A}$

(1) ASS (3) HL (2) AA (4) SAS



- 3. In the diagram below of \triangle TIM and \triangle BER, $\angle T$ and $\angle B$ are right angles, $\overline{IT} \cong \overline{EB}$, and $\overline{TM} \cong \overline{BR}$ Which of the follow could be used to prove that $\triangle TIM \cong \triangle BER$? $I_{A} = \sum_{n=1}^{N} E_{A}$
- (1) ASS (3) HL
- (2) AA (4) SAS



- 4. In the diagram below of $\triangle ARF$ and $\triangle DOG$, $\overline{GD} \cong \overline{AR}$, $\overline{RF} \cong \overline{DO}$, and $\angle D \cong \angle R$ Which of the follow could be used to prove that $\triangle ARF \cong \triangle DOG$?
- (1) AAS (3) HL (2) ASA (4) SAS



- 5. In the diagram below, $\overline{ME} \cong \overline{ES}$, $\angle MEY \cong \angle SER$, and $\angle M \cong \angle S$ Which of the follow could be used to prove that $\Delta MEY \cong \Delta SER$?
- (1) AAS (3) HL
- (2) ASA (4) SAS



