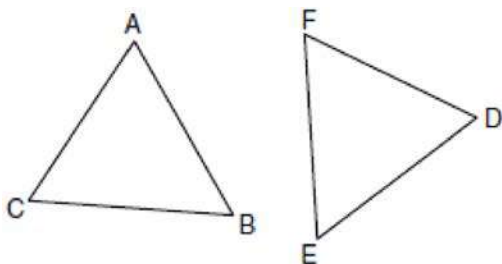


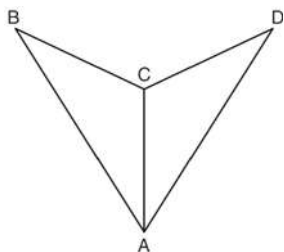
G.G.28: Triangle Congruency 1: Determine the congruence of two triangles by using one of the five congruence techniques (SSS, SAS, ASA, AAS, HL), given sufficient information

- 1 In the diagram of $\triangle ABC$ and $\triangle DEF$ below,
 $\overline{AB} \cong \overline{DE}$, $\angle A \cong \angle D$, and $\angle B \cong \angle E$.



Which method can be used to prove
 $\triangle ABC \cong \triangle DEF$?

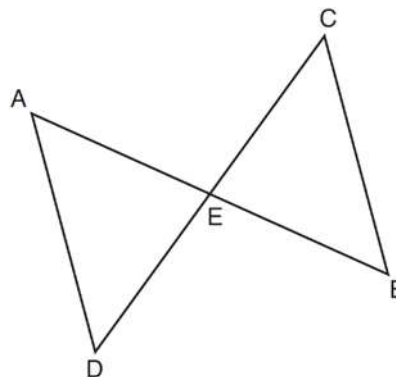
- 1) SSS
 - 2) SAS
 - 3) ASA
 - 4) HL
- 2 As shown in the diagram below, \overline{AC} bisects $\angle BAD$
and $\angle B \cong \angle D$.



Which method could be used to prove
 $\triangle ABC \cong \triangle ADC$?

- 1) SSS
- 2) AAA
- 3) SAS
- 4) AAS

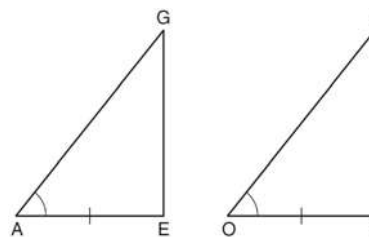
- 3 In the diagram below of $\triangle DAE$ and $\triangle BCE$, \overline{AB} and \overline{CD} intersect at E , such that $\overline{AE} \cong \overline{CE}$ and $\angle BCE \cong \angle DAE$.



Triangle DAE can be proved congruent to triangle
 BCE by

- 1) ASA
- 2) SAS
- 3) SSS
- 4) HL

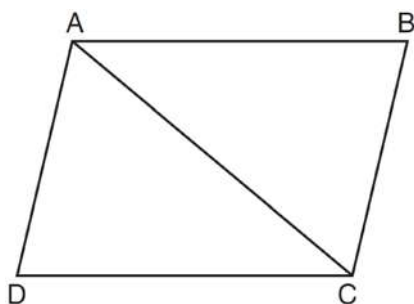
- 4 In the diagram below of $\triangle AGE$ and $\triangle OLD$,
 $\angle GAE \cong \angle LOD$, and $\overline{AE} \cong \overline{OD}$.



To prove that $\triangle AGE$ and $\triangle OLD$ are congruent by
SAS, what other information is needed?

- 1) $\overline{GE} \cong \overline{LD}$
- 2) $\overline{AG} \cong \overline{OL}$
- 3) $\angle AGE \cong \angle OLD$
- 4) $\angle AEG \cong \angle ODL$

- 5 In the diagram of quadrilateral $ABCD$, $\overline{AB} \parallel \overline{CD}$, $\angle ABC \cong \angle CDA$, and diagonal \overline{AC} is drawn.



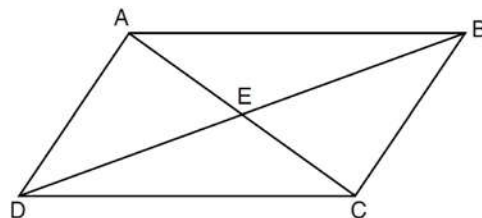
Which method can be used to prove $\triangle ABC$ is congruent to $\triangle CDA$?

- 1) AAS
- 2) SSA
- 3) SAS
- 4) SSS

- 6 The diagonal \overline{AC} is drawn in parallelogram $ABCD$. Which method can *not* be used to prove that $\triangle ABC \cong \triangle CDA$?

- 1) SSS
- 2) SAS
- 3) SSA
- 4) ASA

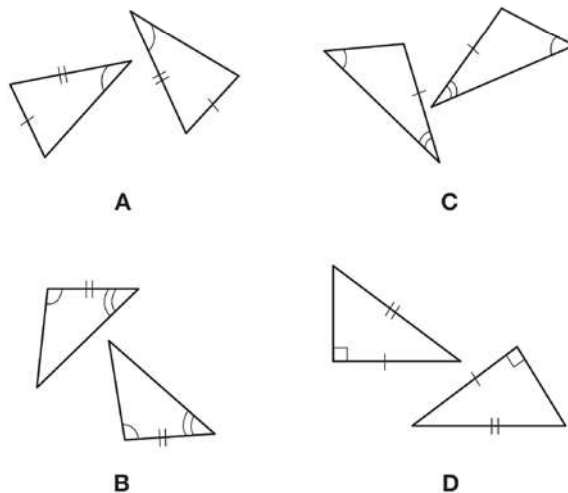
- 7 In parallelogram $ABCD$ shown below, diagonals \overline{AC} and \overline{BD} intersect at E .



Which statement must be true?

- 1) $\overline{AC} \cong \overline{DB}$
- 2) $\angle ABD \cong \angle CBD$
- 3) $\triangle AED \cong \triangle CEB$
- 4) $\triangle DCE \cong \triangle BCE$

- 8 In the diagram below, four pairs of triangles are shown. Congruent corresponding parts are labeled in each pair.

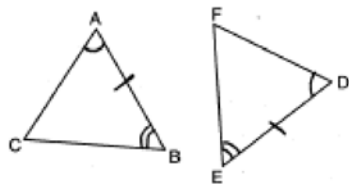


Using only the information given in the diagrams, which pair of triangles can *not* be proven congruent?

- 1) A
- 2) B
- 3) C
- 4) D

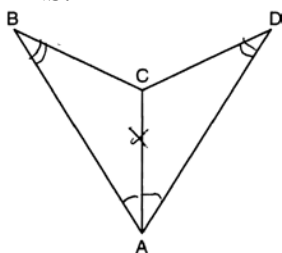
G.G.28: Triangle Congruency 1: Determine the congruence of two triangles by using one of the five congruence techniques (SSS, SAS, ASA, AAS, HL), given sufficient information
Answer Section

1 ANS: 3



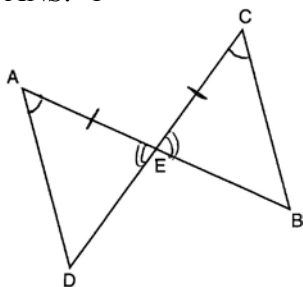
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2 ANS: 4



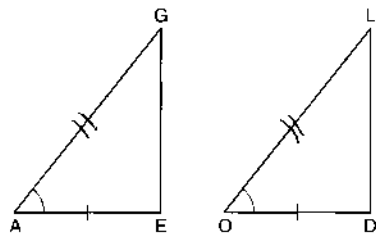
REF: 081114ge

3 ANS: 1



REF: 081210ge

4 ANS: 2



REF: 081007ge

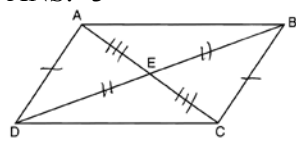
5 ANS: 1

REF: 011122ge

6 ANS: 3

REF: 080913ge

7 ANS: 3



. Opposite sides of a parallelogram are congruent and the diagonals of a parallelogram bisect each other.

REF: 061222ge

8 ANS: 1

REF: 011412ge