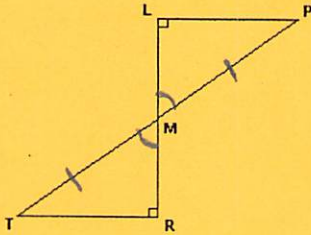


In the diagram below: $\overline{RL} \perp \overline{LP}$, $\overline{LR} \perp \overline{RT}$, and M is the midpoint of \overline{TP} . Which statement could be used to prove $\triangle TMR \cong \triangle PML$?

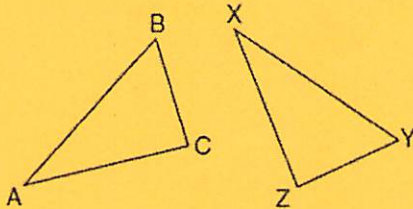


- (1) SAS \cong SAS (3) HL \cong HL
(2) AAS \cong AAS (4) SSS \cong SSS

2. Two parallel lines cut by a transversal can create all the following types of angles *except*

- (1) Alternate interior angles
(2) Alternate exterior angles
(3) Corresponding angles
(4) Complementary angles

3. In the diagram below, $\triangle ABC \cong \triangle XYZ$.



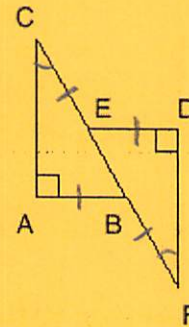
Which two statements identify corresponding congruent parts for these triangles?

- (1) $\overline{AB} \cong \overline{XY}$ and $\angle C \cong \angle Y$
(2) $\overline{AB} \cong \overline{YZ}$ and $\angle C \cong \angle X$
(3) $\overline{BC} \cong \overline{XY}$ and $\angle A \cong \angle Y$
(4) $\overline{BC} \cong \overline{YZ}$ and $\angle A \cong \angle X$

4. The complement of every acute angle *must* be

- (1) an acute angle
(2) a right angle
(3) an obtuse angle
(4) a straight angle

5. In the accompanying diagram, $\overline{CA} \perp \overline{AB}$, $\overline{ED} \perp \overline{DF}$, $\overline{ED} \parallel \overline{AB}$, $\overline{CE} \cong \overline{BF}$, and, $\overline{AB} \cong \overline{ED}$.



Which statement would *not* be used to prove $\triangle ABC \cong \triangle DEF$?

- (1) SAS \cong SAS (3) HL \cong HL
(2) AAS \cong AAS (4) SSS \cong SSS

6. In triangle ABC , if altitude AD is drawn to side BC , which of the following *must* be true?

- (1) $\angle ADB \cong \angle ADC$ (3) $\triangle ADB \cong \triangle ADC$
(2) $\overline{BD} \cong \overline{DC}$ (4) $\angle B \cong \angle C$

7. In $\triangle ABC$, an exterior angle at A measures 40° . Which is the *longest* side of the triangle?

- (1) \overline{AB}
(2) \overline{AC}
(3) \overline{BC}

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Statement	Reasons
① \overline{BD} is med and alt to \overline{AC}	① Given
② D is midpt to AC	② If median then drawn to a midpt
③ $\overline{AD} \cong \overline{CD}$	③ If midpt then $2 \cong$ seg
④ $\overline{BD} \perp \overline{AC}$	④ If alt then \perp seg
⑤ $\angle ADB \cong \angle CDB$	⑤ If \perp then $2 \cong 90^\circ \angle$'s
⑥ $\overline{BD} \cong \overline{BD}$	⑥ Reflexive Prop
⑦ $\triangle ABD \cong \triangle CBD$	⑦ SAS
⑧ $\overline{BA} \cong \overline{BC}$	⑧ CPCTC

9. $(-4, 0)$

10. skew

11. $x = 8$ 13. If a \triangle is isos then 2 sides of a \triangle are \cong

14. $4x - 40 = x + 50$

$3x = 90$

$x = 30$

$m\angle AEC = 4(30) - 40 = 80^\circ$

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Statements	Reason
①	① Given
② $\angle B \cong \angle C$	② Angles opp \cong sides in Δ are \cong
③ $\angle DEB \cong \angle FGC$	③ If \perp then $2 \cong 90^\circ \angle$'s
④ $\overline{EG} \cong \overline{EG}$	④ Reflexive Prop.
⑤ $\overline{BG} - \overline{EG} \cong \overline{CE} - \overline{GE}$	⑤ Sub Prop of Equality
⑥ $\overline{BE} \cong \overline{CG}$	⑥ Segment Subtraction Postulate
⑦ $\triangle BOE \cong \triangle CFG$	⑦ ASA
⑧ $\overline{BD} \cong \overline{CF}$	⑧ CPCTC

Scrap Graph Paper — This sheet will *not* be scored.

Tear Here

Tear Here

