Notes 5.3-5.6B Showing Triangle Congruence; Triangle Proofs

Objective: _____

_____

In each example, answer each of the following questions.

a) State the congruent parts.
b) How are the triangles congruent?
c) State the congruence.

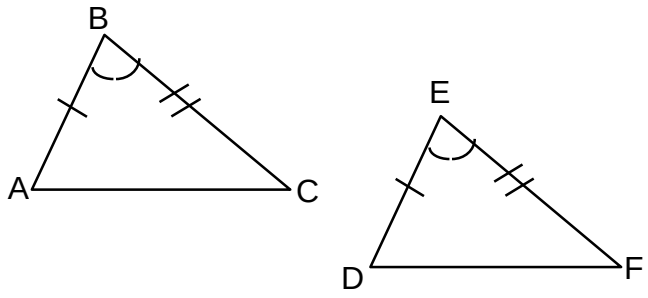
1. a) _____

_____

_____

b) _____

c) _____



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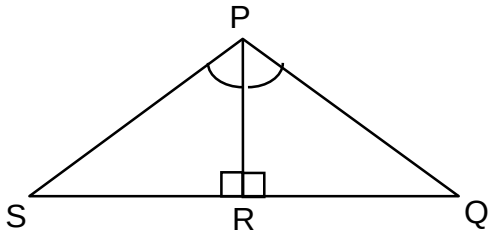
2. a) _____

_____

_____

b) _____

c) _____



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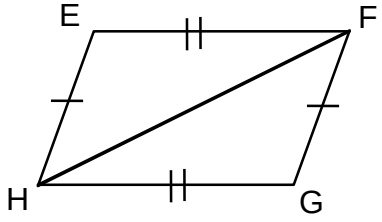
3. a) _____

_____

_____

b) _____

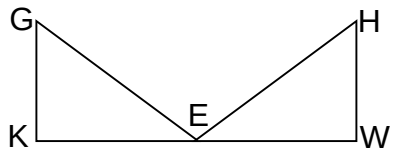
c) _____



EXAMPLES: **Mark the drawing to show the given information and**

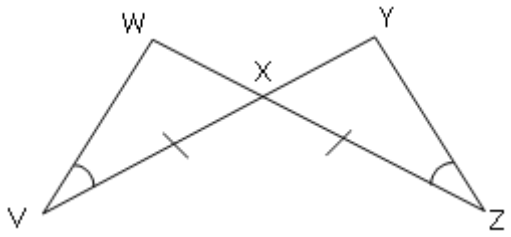
fill in the blanks.

4. E is the midpoint of $\overline{KW}$. $\angle KEG \cong \angle WEH$, and $\angle K \cong \angle W$.



$\Delta KEG \cong \Delta$_____ by _____.

5. $\overline{VX} \cong \overline{ZX}$ and $\angle V \cong \angle Z$.

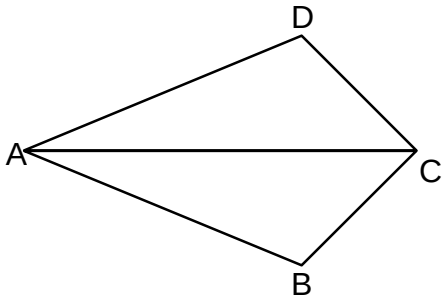


$\Delta VXW \cong \Delta$_____ by _____.

EXAMPLE 6:

Given: $\overline{AD} \cong \overline{AB}$
$\overline{DC} \cong \overline{BC}$

Prove: $\Delta ADC \cong \Delta ABC$



STATEMENTS	REASONS

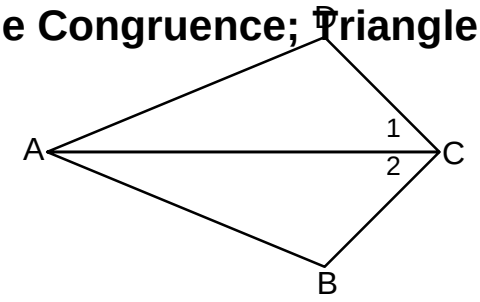
Notes 5.3-5.6B Showing Triangle Congruence; Triangle Proofs

EXAMPLE 7:

Given: $\overline{AC}$ bisects $\angle DAB$

$\angle 1 \cong \angle 2$

Prove: $\Delta ABC \cong \Delta ADC$



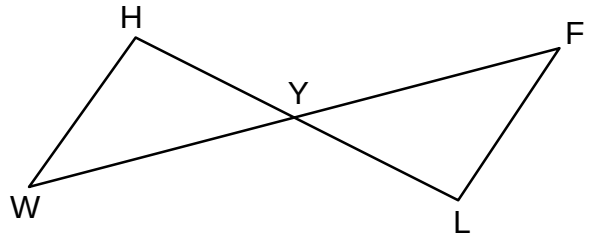
STATEMENTS	REASONS

EXAMPLE 8:

Given: $\overline{HY} \cong \overline{LY}$

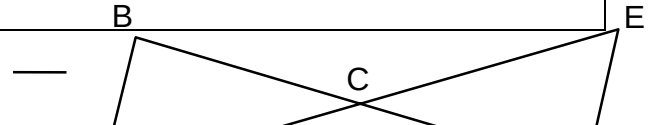
$\overline{WH} \parallel \overline{LF}$

Prove: $\Delta WHY \cong \Delta FLY$



STATEMENTS	REASONS

EXAMPLE 9:



Given: C is the midpoint of $\overline{BD}$; C is the midpoint of AE.

Prove: $\Delta ABC \cong \Delta EDC$

STATEMENTS	REASONS