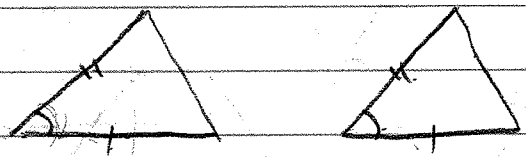
Qu. 23 p238# 24-26

2 Days?

4.4 Prove Δ's Congruent by SAS & HL

* Side-Angle-Side or Hypotenuse-Leg

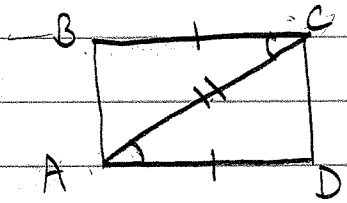
For SAS,



(included)

* Congruent ∠ must be inbetween the 2 congruent sides, like so.

SAS

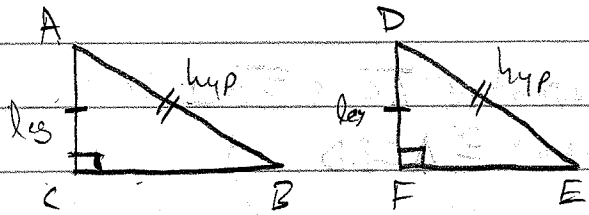


Are the Δ's congruent? By what? Name the congruence.

Yes .. by SAS ΔADC ≅ ΔCBA

ΔABC ≅ ΔCDA

For HL, must have right triangle

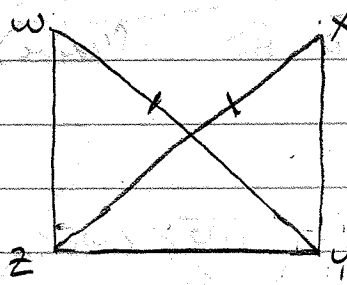


* Because hypotenuse & leg of Δ's are ≅, Δ ACB ≅ Δ DFE

ΔALB ≅ Δ

p243: 3-15, 20-22

Given $\overline{WY} \cong \overline{XZ}$, $\overline{WZ} \perp \overline{ZY}$ & $\overline{XY} \perp \overline{ZY}$, are the Δ's Congruent?



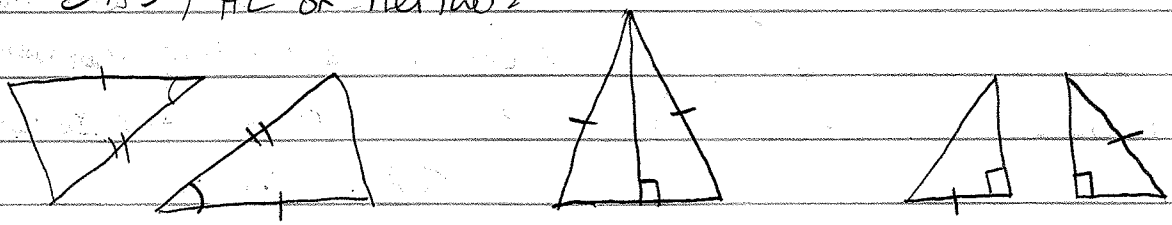
* ⊥ means right angles ... ∠WZY = ∠XYZ = 90°
* Are right triangles (Look for HL)
* WY & XZ are the hypotenuses
Oh, share $\overline{ZY}$, so $\overline{ZY} \cong \overline{ZY}$ (Reflexive)

So Δ WZY ≅ Δ XYZ

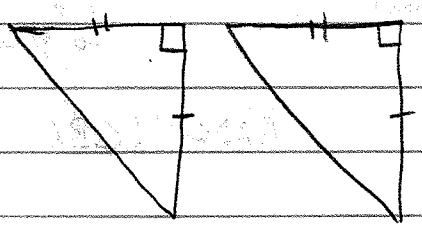
Day 2 Warm-up p245: 31, 32

Homework Quiz p246

SAS, HL or Neither?

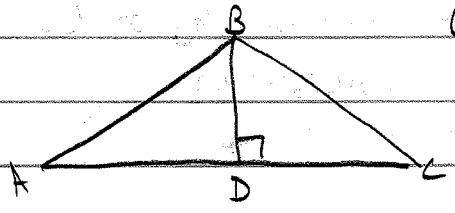


SAS HL Neither



SAS

Example:

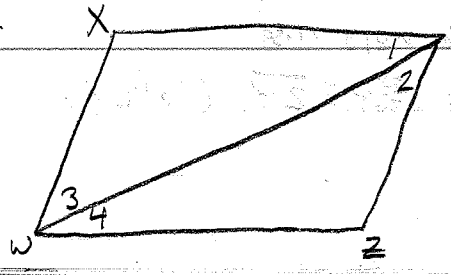


Given D is midpoint of $\overline{AC}$ & $\overline{BD} \perp AC$,
Prove $\triangle ABD \cong \triangle CBD$

* Says nothing about hyp, so think SAS.

Side $\overline{AD} \cong \overline{DC}$ (midpoint)
Angle - know $\angle ADB \cong \angle CDB$ (90°/perpendicular)
Side - $\overline{BD} \cong \overline{BD}$ (Reflexive)

For SAS, Fill in blanks



$\overline{XY}$, ____ (∠XYW), $\overline{YW}$

____ ($\overline{WZ}$), ∠ZWY, $\overline{YW}$

$\overline{XY}$, ∠XYZ, ____ ($\overline{YZ}$)

$\overline{WZ}$, ∠WZY, ____ ($\overline{YZ}$)

____ ($\overline{WX}$), ∠WXY, $\overline{XY}$

$\overline{WX}$, ∠XWZ, $\overline{WZ}$