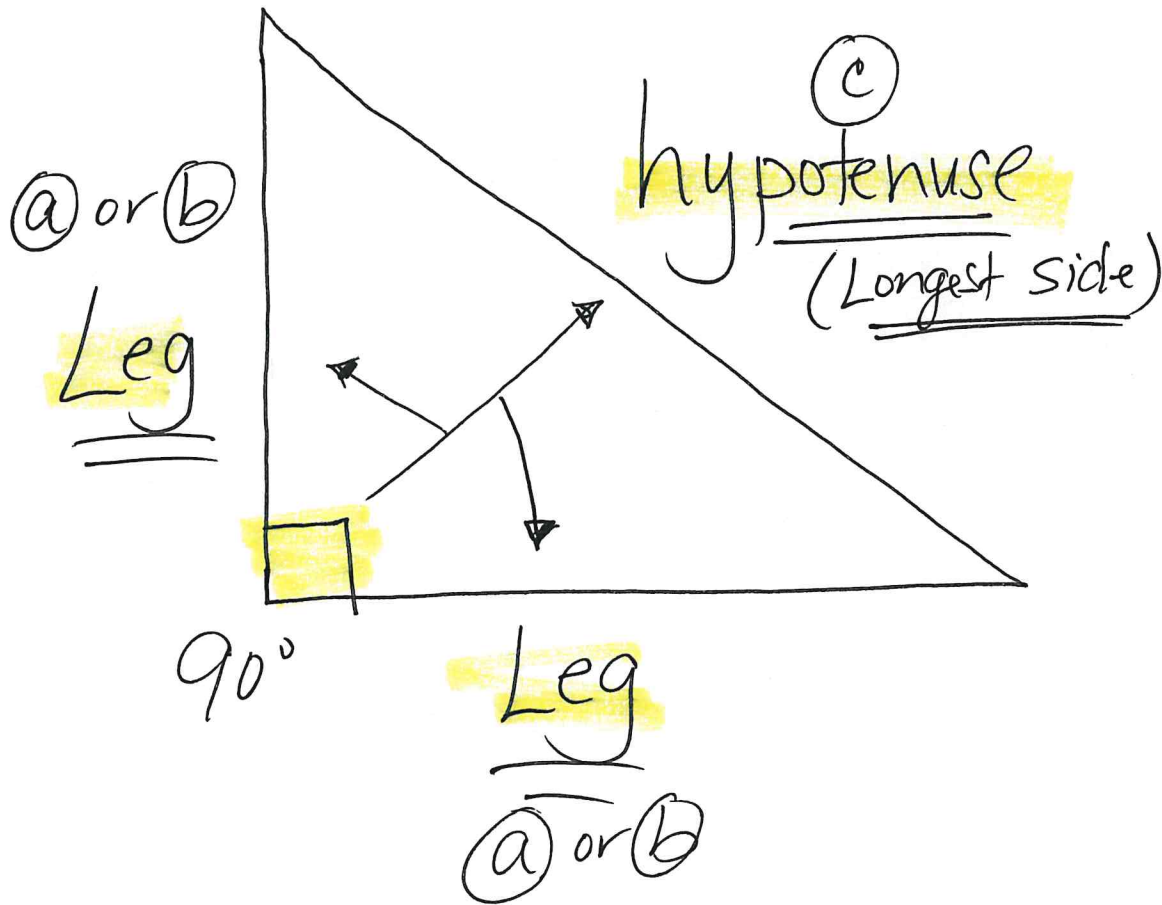


10/19 Lesson 25 (day 2)

Hypotenuse - Leg - 90° (HL 90°)
(Right Δ)

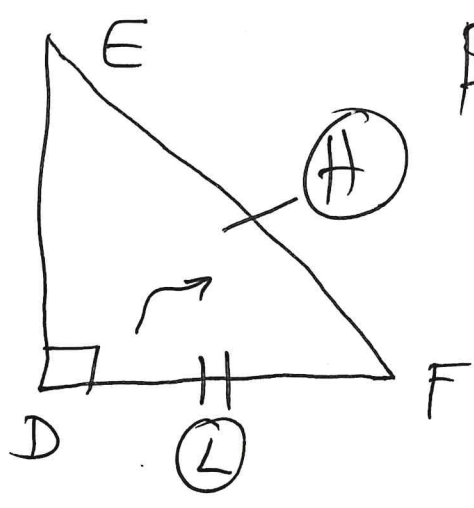
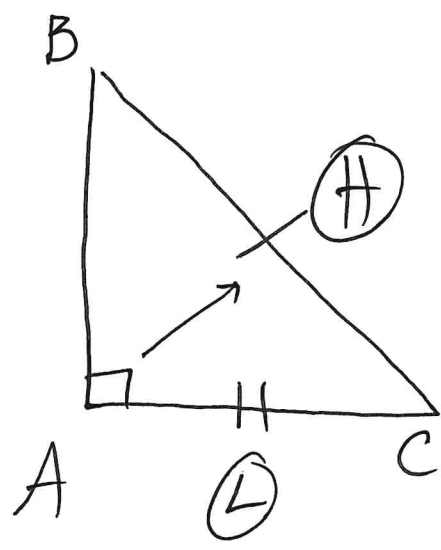


$$a^2 + b^2 = c^2$$

pythagorean
Theorem

(1)

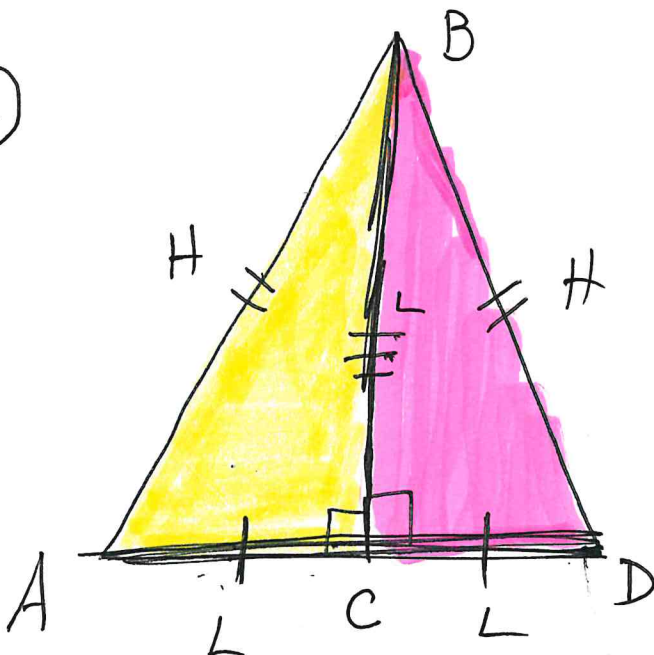
H.L. 90° Easy!



prove $\Delta ABC \cong \Delta DEF$

Statements	Reasons
① See Above	① Given
② $\overline{BC} \cong \overline{EF}$	② corr. sides (\cong)
③ $\overline{AC} \cong \overline{DF}$	③ corr. sides (\cong)
④ $\angle BAC \cong \angle EDF$	④ Right \angle 's
⑤ $\Delta ABC \cong \Delta DEF$	⑤ H.L. 90°
	②

(ie 2)



SAS, (HL90), SSS

Given \rightarrow $\overline{AD} \perp \overline{BC}$
 $\overline{AB} \cong \overline{BD}$

prove \rightarrow $\triangle ABC \cong \triangle DBC$

perpendicular
 $90^\circ \angle$'s

bisector
 makes
 2 \cong parts

Statements

Reasons

- ① See Above
- ② $\overline{AB} \cong \overline{BD}$
- ③ $\overline{BC} \cong \overline{BC}$ (or)
 $\overline{AC} \cong \overline{CD}$
- ④ $\angle ACB \cong \angle DCB$
- ⑤ $\triangle ABC \cong \triangle DBC$

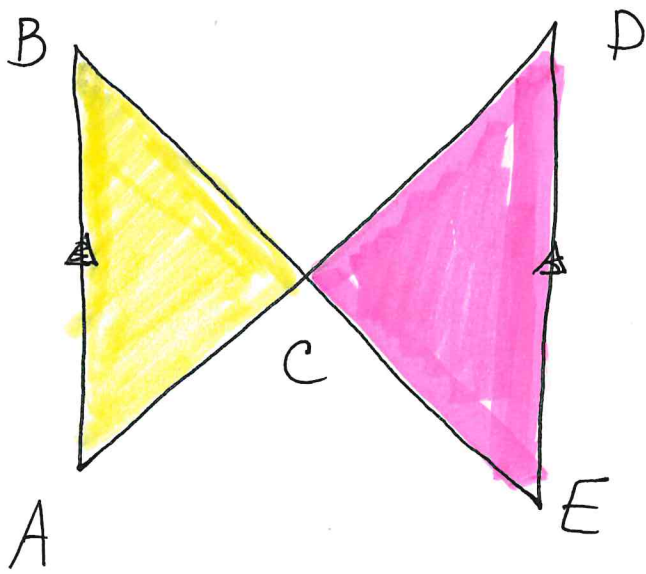
- ① Given
- ② corr. sides (\cong)
- ③ Reflexive
 Bisector
- ④ Right \angle or $90^\circ \angle$
- ⑤ HL90
- ③

Lesson 25

Name: _____

HR: _____

1. 2 possible answers AAS or ASA alt. int \angle s
corr \angle s



Given $\rightarrow \overline{BA} \parallel \overline{DE}$

C is midpt. of \overline{BE}

Prove $\rightarrow \triangle ABC \cong \triangle DCE$

Statements

Reasons

①

①

②

②

③

③

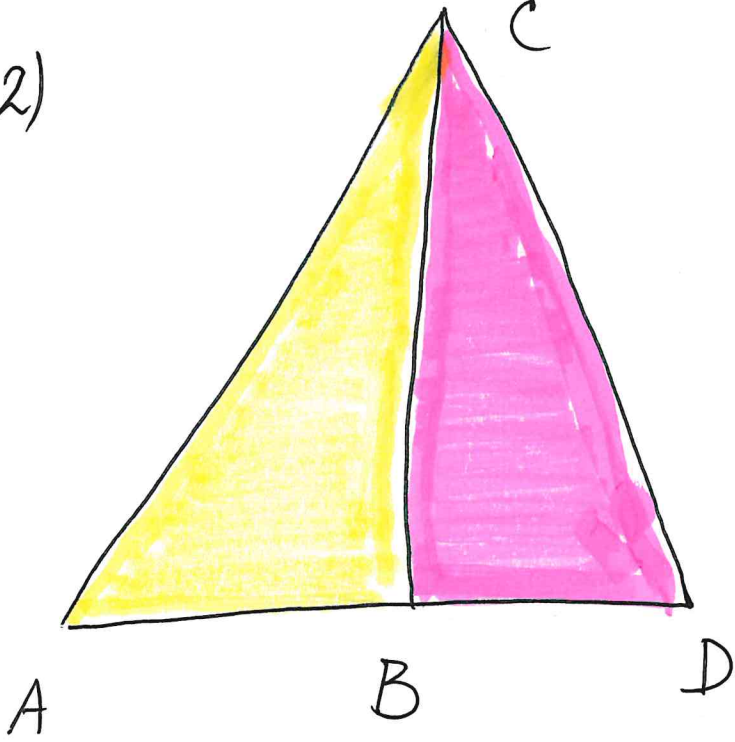
④

④

⑤

⑤

2)



Given $\triangleright \overline{AD} \perp \overline{BC}$

$\overline{AC} \cong \overline{CD}$

prove $\triangleright \triangle ABC \cong \triangle DBC$

Statements

Reasons

(1) See Above

(1) Given

(2)

(2)

(3)

(3)

(4)

(4)

(5) $\triangle ABC \cong \triangle DBC$

(5)