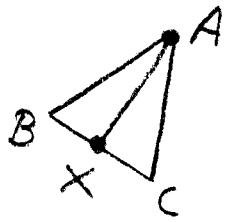
BE-Geometry II Thursday 10-14-10

Name the property of congruence:

① 

$\overline{AX} \cong AX$

② $\triangle ABC \cong \triangle DEF$

$\therefore \triangle DEF \cong \triangle ABC$

NOTE: $\therefore$ means "therefore"

③ $\angle A \cong \angle B$

$\angle B \cong \angle C$

$\therefore \angle A \cong \angle C$

Solve using the Quadratic Formula:

④ $-5x^2 + 8x = 1$

⑤ $3x^2 - 5x = 0$

ANS ① Reflexive ② Symmetric ③ Transitive

④ $-5x^2 + 8x - 1 = 0$

$a = -5$, $b = 8$, $c = -1$

$b^2 - 4ac$

$(8)^2 - 4(-5)(-1)$

$64 - 20 = 44 = d$

$x = \frac{-b \pm \sqrt{d}}{2a} = \frac{-8 \pm 2\sqrt{11}}{-10}$

$x = \frac{4 \pm \sqrt{11}}{5}$

$3x^2 - 5x + 0 = 0$

$a = 3$, $b = -5$, $c = 0$

$b^2 - 4ac$

$(-5)^2 - 4(3)(0)$

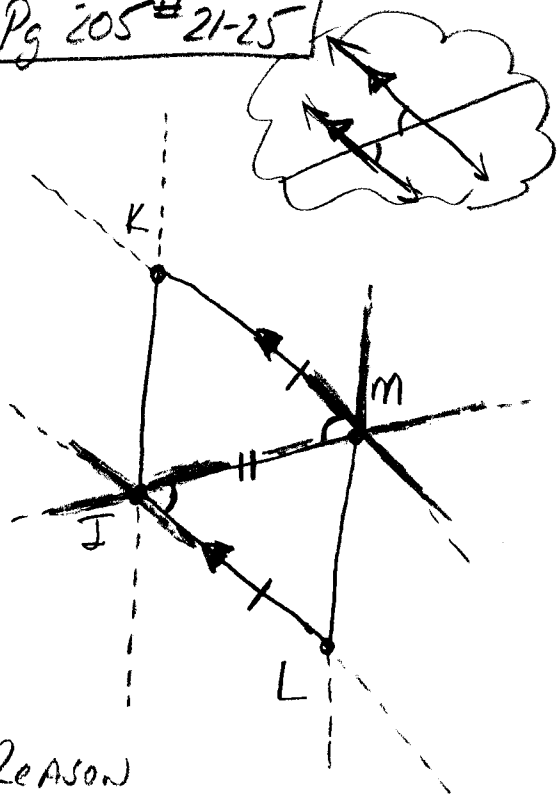
$25 = d$

$x = \frac{-b \pm \sqrt{d}}{2a} = \frac{5 \pm 5}{6}$

$x = \left\{\frac{5}{3}, 0\right\}$

HW Review Pg 203 # 6-8 Pg 205 # 21-25

Pg 203 # 6



GIVEN: $\overline{KM} \parallel \overline{JL}$
$\overline{KM} \cong \overline{JL}$

Prove $\triangle JKM \cong \triangle MLJ$

STATEMENT	REASON
$\overline{KM} \cong \overline{JL}$	GIVEN
$\overline{JM} \cong \overline{JM}$	REFLEXIVE PROPERTY
$\overline{KM} \parallel \overline{JL}$	GIVEN
$\angle m \cong \angle J$	ALT. INT. $\angle$S $\cong$
$\triangle JKM \cong \triangle MLJ$	SAS POSTULATE

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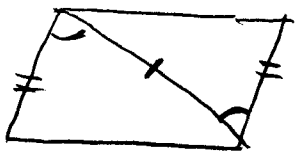
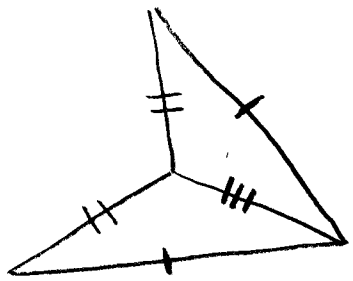
(7)



SAS

(8)

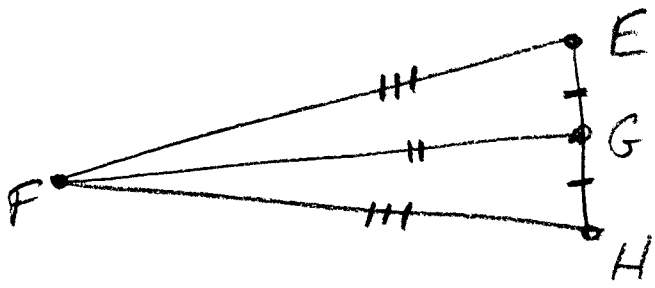


SSS

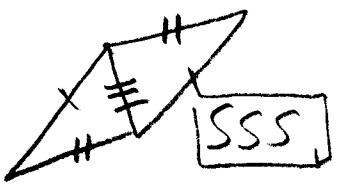
(21) $\overline{EF} \cong \overline{HF}$

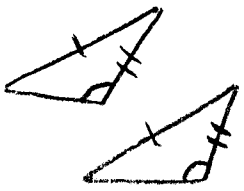
G is midpoint of $\overline{EH}$ } Given

Prove: $\triangle EFG \cong \triangle HFG$



STATEMENT	REASON
$\overline{EF} \cong \overline{HF}$	Given
$\overline{EG} \cong \overline{GH}$	Given, def. of midpoint
$FG \cong FG$	Reflexive Property
$\triangle EFG \cong \triangle HFG$	SSS Postulate

(22) 

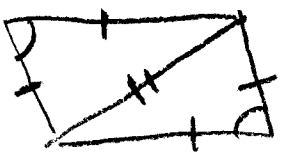
(23) 

SSA ∴ NOT POSSIBLE

(24) 

S?A

NOT POSSIBLE

(25) 

SSS or SAS