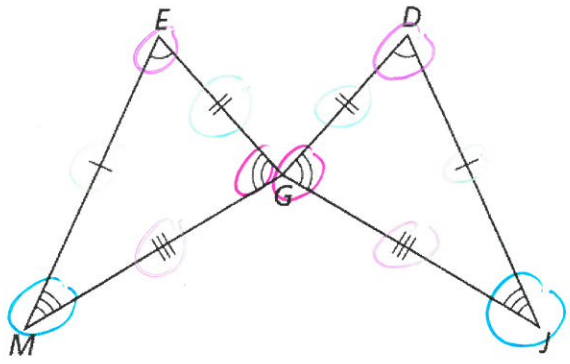
Triangles Review 2

Triangle Congruence Review

Name: _____ Block _____

Use the picture to write all 6 congruence statements for all 6 congruent parts.



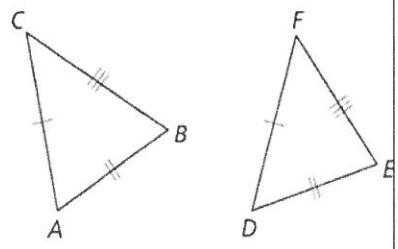
SIDES	ANGLES
1. $\overline{EM} \cong \overline{DJ}$	2. $\overline{EG} \cong \overline{DG}$
3. $\overline{MG} \cong \overline{JG}$	4. $\angle MEG \cong \angle JEG$
5. $\angle EMG \cong \angle DJG$	6. $\angle EGM \cong \angle DGJ$
7. $\triangle EGM \cong \triangle DGG$	

In problems 8-13 below, determine if the two triangles are congruent with the given information.

a) Write the TRIANGLE CONGRUENCY STATEMENT (Δ____ ≅ Δ _____).

b) Write the POSTULATE or THEOREM that proves.

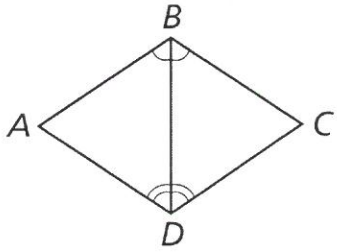
8.



a. $\triangle ABC \cong \triangle DEF$

b. SSS

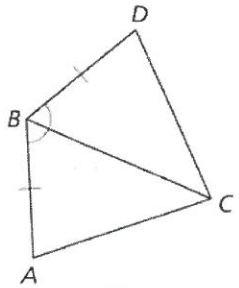
9.



a. $\triangle ADE \cong \triangle CDB$

b. ASA

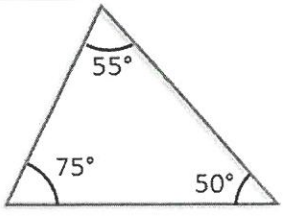
10.

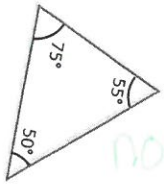


a. $\triangle ABC \cong \triangle DBC$

b. ASA

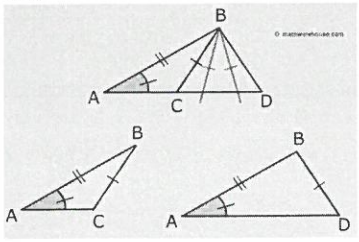
11.





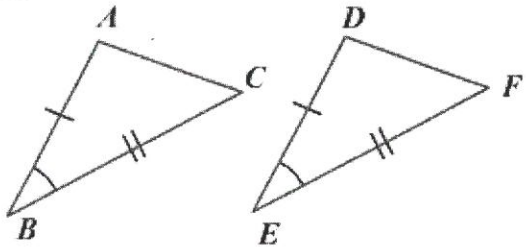
not congruent

12.



not congruent

13.



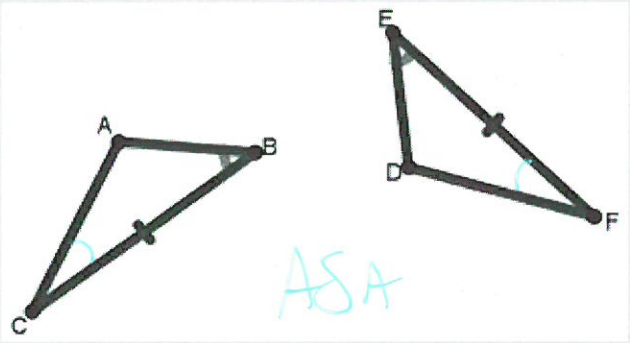
$\triangle ABC \cong \triangle DEF$

ASA

Triangle Congruence Review

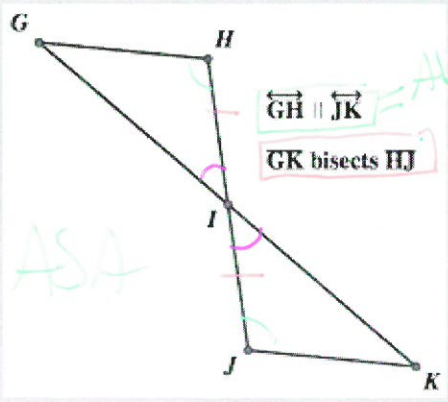
Name: _____ Block _____

In the figure below, mark <u>one</u> more pair of corresponding parts of the two triangles that will ensure that the two triangles are congruent. State how you know the two triangles are congruent.



ASA

In the figure below, can you conclude that $\Delta GHI \cong \Delta JKI$? Explain why or why not.



Alternate Interior Angles

ASA

Suppose you knew that the hypotenuse of two right triangles were congruent. Are the two triangles necessarily congruent? Explain why they are or give an example to show that they are not.

JMU Pivotal Items for Geometry

No, you also need a leg to be congruent because of hypotenuse leg theorem