

TOPIC/OBJECTIVE: Proof Notes

NAME: _____

CONTENT/CLASS: Geometry

CLASS/PERIOD: 7

DATE: 2/4/16

ESSENTIAL QUESTION:

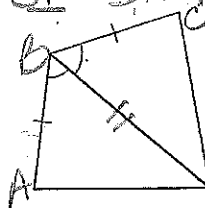
What information is helpful when proving 2 triangles are \cong ?

QUESTIONS:

NOTES:

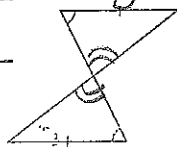
Given - this is a reason used when what you are stating in a proof is marked in a diagram or stated as a given.

Reflexive Property - (shared side)



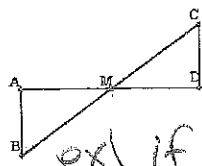
this property is used to state if a line segment is congruent to itself ex) $\overline{BD} \cong \overline{BD}$

Vertical angles -



not marked on a diagram but they are \cong

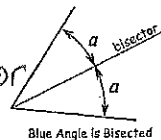
Midpoint



divides line segment into two \cong parts

ex) if M is midpoint of \overline{BC} , then $\overline{BM} \cong \overline{CM}$

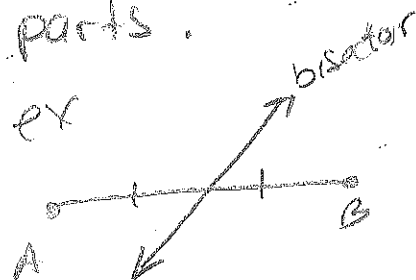
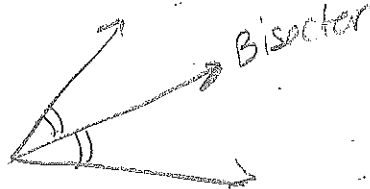
Bisector



Blue Angle is Bisected

line/segment/ray that divides an angle or line into 2 congruent parts.

ex)



SUMMARY:

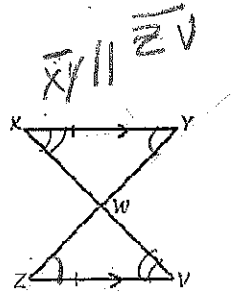
QUESTIONS:

NOTES:

Parallel lines & their angles -

Symbol: \parallel

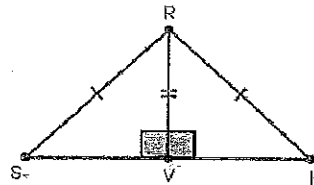
AIA are \cong



parallel lines have the same slope

AIA are NOT marked for you.

Symbol: \perp
Perpendicular lines & their angles -



$\overline{RV} \perp \overline{SK}$

create two 90° angles. (they are \cong): $\angle RVS \cong \angle RVK$

List the six corresponding parts of the congruent triangles. Mark the congruences on the figure.

	$\angle A \cong \angle D$	$\overline{AB} \cong \overline{ED}$
	$\angle B \cong \angle E$	$\overline{BC} \cong \overline{FE}$
	$\angle C \cong \angle F$	$\overline{AC} \cong \overline{FD}$

Corresponding Parts of Congruent Triangles are Congruent (CPCTC) -

if two or more triangles are proven to be \cong , then all corresponding angles and sides are \cong .

SUMMARY: