CORNELL NOTES

TOPIC/OBJECTIVE: Congruent triangles

CONTENT/CLASS: Geometry

NAME:

CLASS/PERIOD: 2

DATE: 1/28

ESSENTIAL QUESTION: How can we determine if 2 triangles are congruent?

QUESTIONS:

Same
B

Different
A

NOTES:

Look around at the posters of triangles we created. Which posters show triangles that are all the same? Which posters show triangles that are different? Based on this, list what you need to know about a triangle in order to prove they are congruent (for example, one side, a side and an adjacent angle, all three sides, a side an an opposite angle, etc.)

Same

B- side-side-side
F- Angle-side-Angle
G- side-Angle-side
H ~~ABS~~ angle-angle-side

→ congruence conjectures to prove if triangles are congruent.

Different

A- side-side
C- Side-Angle
D- Side Angle
E- Angle Angle ← always similar but not always ≅
I- Angle-side-side ← not always ≅

Not enough info.

Review from Semester 1

Similar: same shape, but not necessarily same size

Similarity conjectures: SAS, SSS, AA

symbol: ~ keyword: proportional

Congruent- exact same size and shape

symbol: ≅ keyword: the same, equal

SUMMARY:

CORNELL NOTES

TOPIC/OBJECTIVE:

CONTENT/CLASS:

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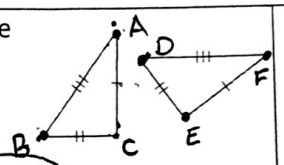
ESSENTIAL QUESTION:

QUESTIONS:

NOTES:

side-side-side



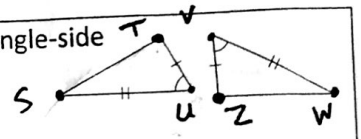
S $\overline{AC} \cong \overline{EF}$

S $\overline{BC} \cong \overline{DE}$

S $\overline{AB} \cong \overline{DF}$

$\triangle ABC \cong \triangle FDE$

side-angle-side

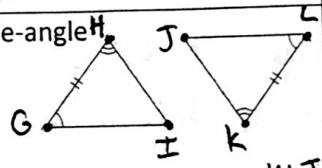


S $\overline{TU} \cong \overline{VZ}$

A $\angle U \cong V$ or $\angle TUS \cong \angle ZVW$

S $\overline{SU} \cong \overline{WV}$

angle-side-angle

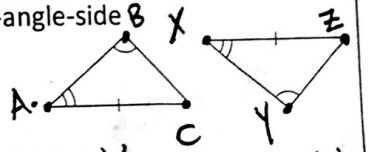


A $\angle G \cong \angle L$ or $\angle HGI \cong \angle KLJ$

S $\overline{GH} \cong \overline{LK}$

A $\angle H \cong \angle K$ or $\angle IHG \cong \angle JKL$

angle-angle-side

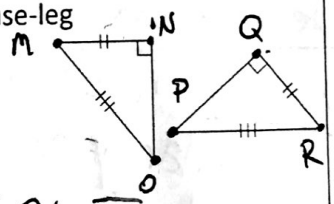


A $\angle B \cong \angle Y$ $\angle CBA \cong \angle ZYX$

A $\angle A \cong \angle X$ $\angle CAB \cong \angle ZXY$

S $\overline{AC} \cong \overline{XZ}$

hypotenuse-leg



H $\overline{MO} \cong \overline{PR}$

L $\overline{MN} \cong \overline{QR}$

Sets of sides and angles that DON'T prove congruence:

AA~ ← proves similarity but not ≅

ASS or SSA Can not prove similarity or congruence

SUMMARY: