CORNELL NOTES

TOPIC/OBJECTIVE:

CONTENT/CLASS:

NAME:

CLASS/PERIOD:

DATE:

ESSENTIAL QUESTION:

QUESTIONS:

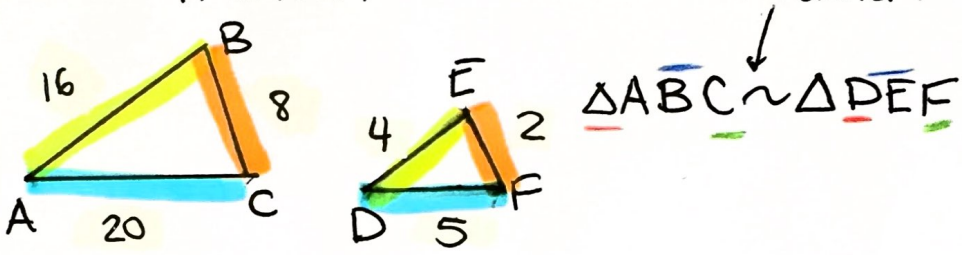
NOTES:

Ratio- comparison of 2 quantities

examples $a:b$, $\frac{a}{b}$, or "a to b"

Similar shapes - same shape, not necessarily same size

notation: $\sim$



ΔABC is similar to ΔDEF IF

① Corresponding angles $\cong$

$\angle A \cong \angle D$

$\angle B \cong \angle E$

$\angle C \cong \angle F$

② Corresponding sides are in proportion

$$\frac{AB}{DE} = \frac{AC}{DF} = \frac{BC}{EF}$$

Scale factor/zoom factor - ratio between any pair of corresponding sides in similar figures

SUMMARY:

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SUMMARY:

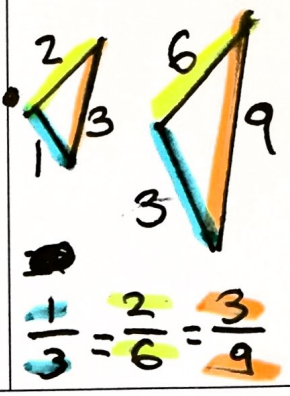
Similarity Conjectures Toolkit

Side-Side-Side (SSS) Similarity Conjecture

Definition:

If 3 sides of a $\triangle$ are in proportion to 3 corresponding side of another $\triangle$, then the $\triangle$'s are $\sim$ similar

Example:



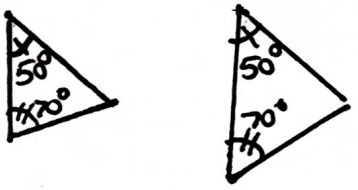
$\frac{1}{3} = \frac{2}{6} = \frac{3}{9}$

Angle-Angle (AA) Similarity Conjecture

Definition:

If 2 angles of 1 $\triangle$ are congruent to 2 angles of a 2nd triangle, then triangles are similar $\sim$

Example:

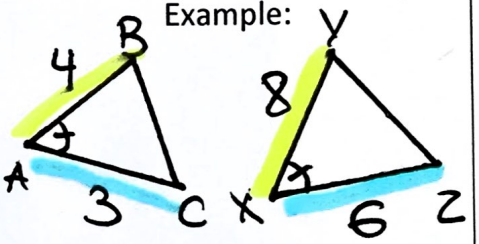


Side-Angle-Side Similarity Conjecture

Definition:

If 2 $\triangle$s have corresponding angles that are $\cong$ and the corresponding sides with equal ratios, the $\triangle$s are similar

Example:



$\frac{3}{6} = \frac{4}{8}$