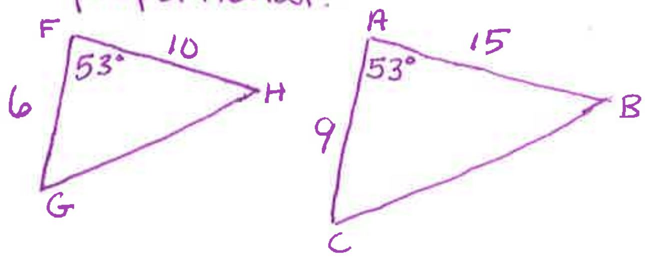
Notes: Similarity Shortcuts

SAS Postulate - one set of corresponding angles are congruent and the sides including these angles are proportional*



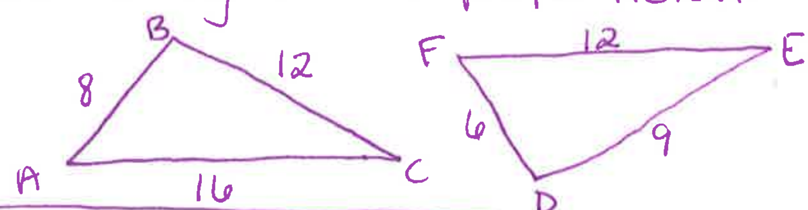
$\angle F \cong \angle A$ (A)

$\frac{FG}{AC} = \frac{6}{9} = \frac{2}{3}$ (S)

$\frac{FH}{AB} = \frac{10}{15} = \frac{2}{3}$ (S)

therefore, $\triangle FGH \sim \triangle ACB$

SSS Postulate - All corresponding side lengths of two triangles are proportional*



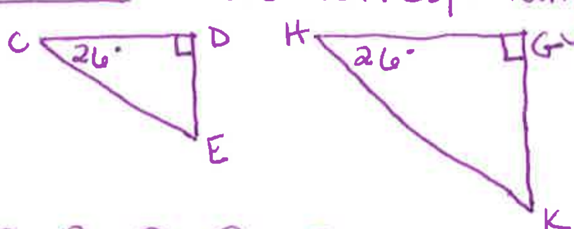
Shortest sides ↙ $\frac{AB}{FD} = \frac{8}{6} = \frac{4}{3}$

Longest sides ↙ $\frac{AC}{FE} = \frac{16}{12} = \frac{4}{3}$

Remaining Sides ↙ $\frac{BC}{DE} = \frac{12}{9} = \frac{4}{3}$

therefore, $\triangle ABC \sim \triangle DFE$

AA Theorem - Two corresponding angles are congruent



there

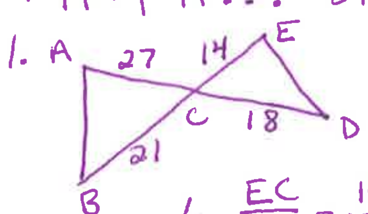
$\angle C \cong \angle H$

$\angle D \cong \angle G$

therefore, $\triangle CDE \sim \triangle HGK$

Apply it... SHOW THAT THE △'S ARE SIMILAR.

1.



1. $\frac{EC}{CB} = \frac{14}{21} =$
2. $\angle ACB \cong \angle ECD$
3.
4. $\triangle ACB \sim \triangle DCE$

2.