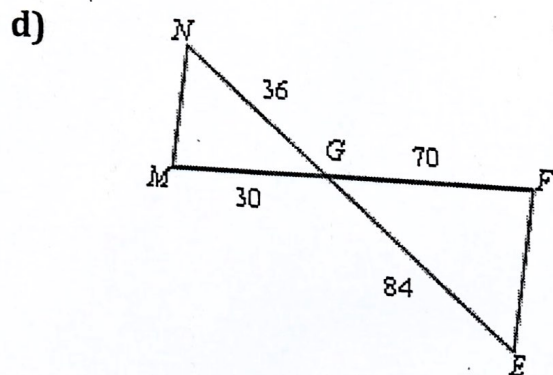
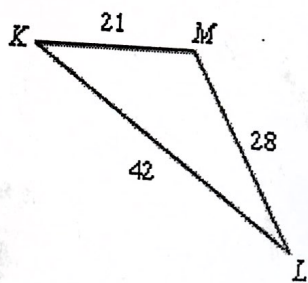
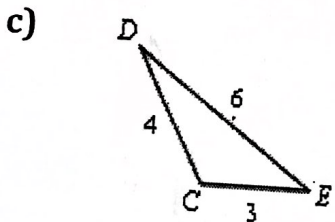
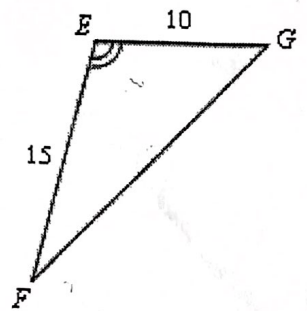
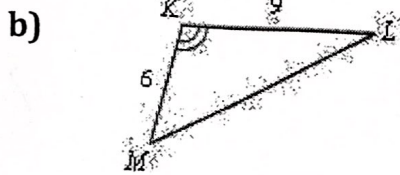
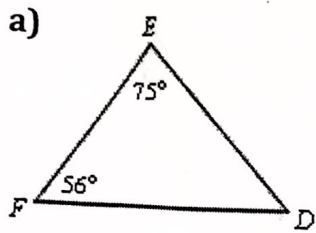


4. The triangles in each problem below are similar, make flowchart to prove that the triangles are similar.



A)

$$\angle F \cong \angle P$$

Given

$$\angle E \cong \angle L$$

Given

$$\triangle FED \sim \triangle PLM$$

AA  $\sim$

B)

$$\frac{6}{10} = .6$$

Given

$$\angle K \cong \angle E$$

Given

$$\frac{9}{15} = .6$$

Given

$$\triangle MKL \sim \triangle GEF$$

C)

$$\frac{21}{3} = 7$$

Given

$$\frac{28}{4} = 7$$

Given

$$\frac{42}{6} = 7$$

Given

$$\triangle ECD \sim \triangle KML$$

SAS  $\sim$

D)

$$\frac{70}{30} = 2.\bar{3}$$

Given

$$\angle MGN \cong \angle EGF$$

Vertical Angles  $\cong$

$$\frac{84}{36} = 2.\bar{3}$$

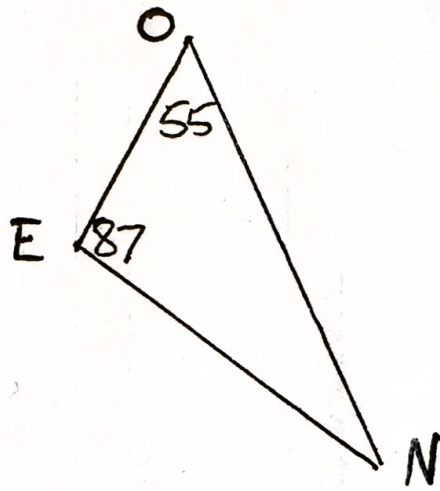
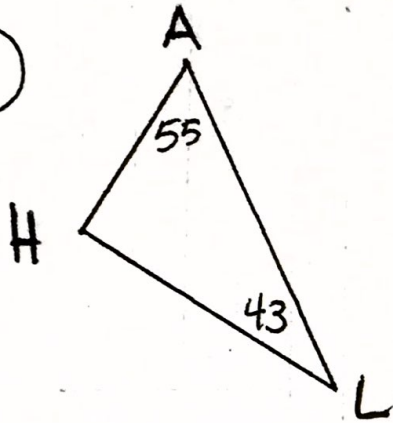
Given

$$\triangle MGN \sim \triangle FGE$$

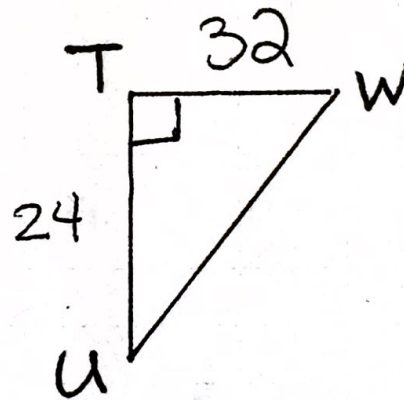
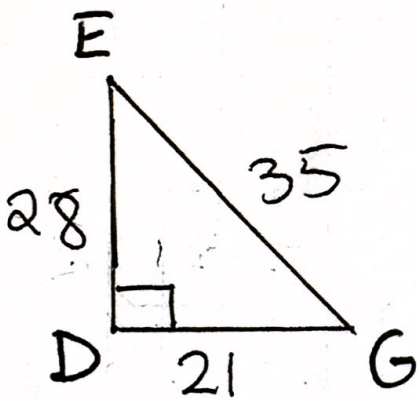
SAS  $\sim$

Determine if each of the triangle pairs are similar. Show your work. If similar, state the similarity conjecture. If not, mark the reason. Figures are not drawn to scale.

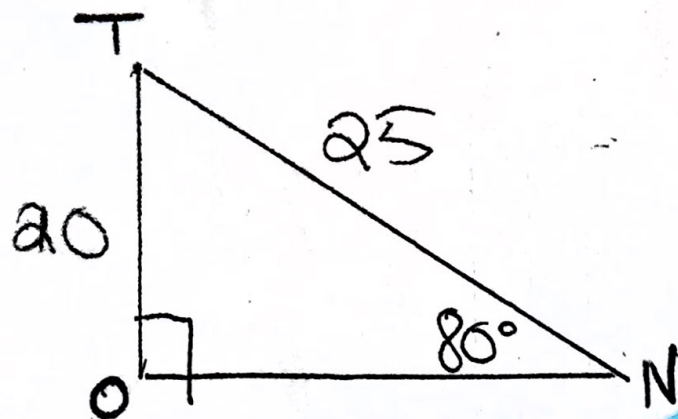
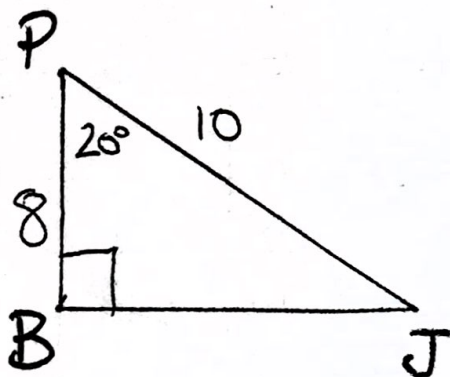
①



②



③

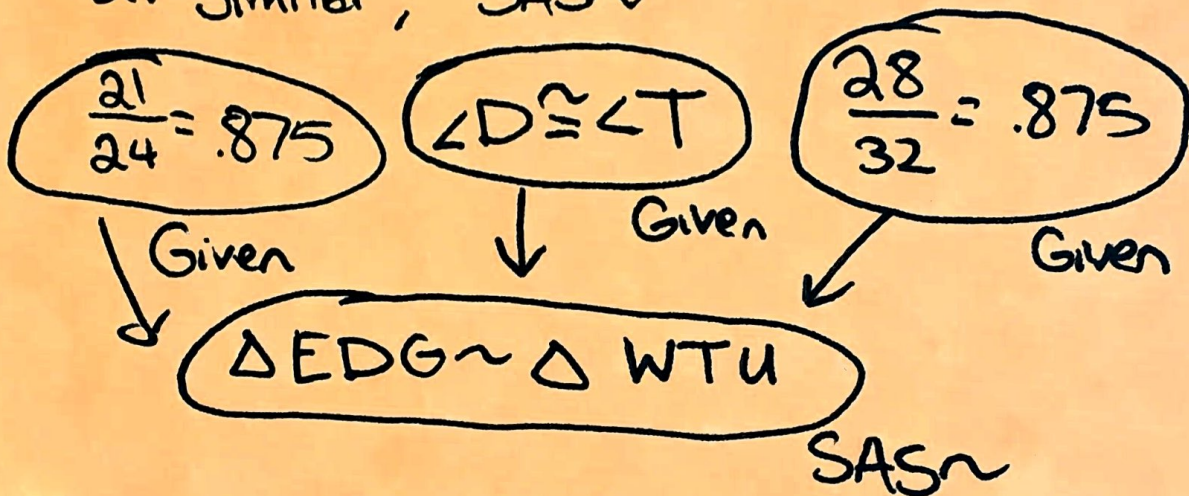


# AN FINANCE

ATION

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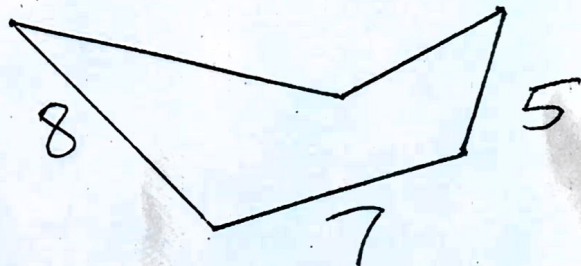
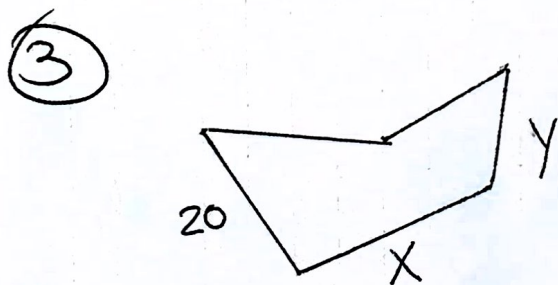
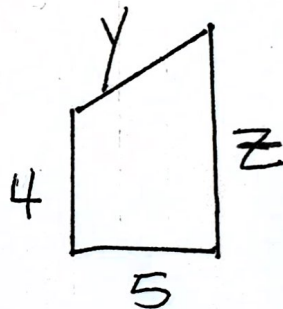
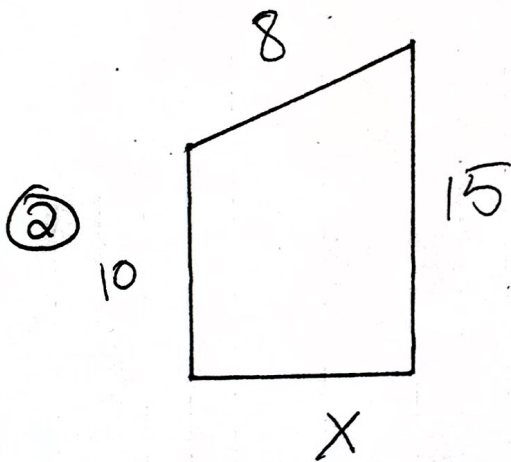
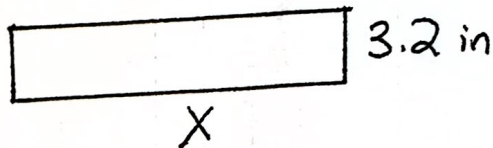
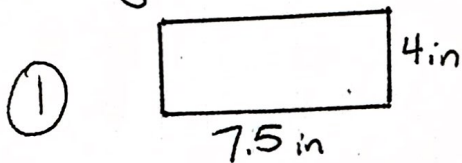
1. Not similar
2. Similar, SAS



- ③ Not Similar

The shapes are similar.

Write an equation and solve for  $X$  and  $y$ .  
Diagrams not drawn to scale.



$$\textcircled{1} \quad \frac{4}{7.5} = \frac{3.2}{x}$$

$$\frac{4x}{4} = \frac{24}{4}$$

$$x = 6 \text{ in}$$

$$\textcircled{2} \quad \frac{8}{10} = \frac{y}{4}$$

$$\frac{10y}{10} = \frac{32}{10}$$

$$y = 3.2$$

$$\frac{10}{15} = \frac{4}{z}$$

$$\frac{10z}{10} = \frac{60}{10}$$

$$z = 6$$

$$\frac{10}{x} = \frac{4}{5}$$

$$\frac{4x}{4} = \frac{50}{4}$$

$$x = 12.5$$

$$\textcircled{3} \quad \frac{20}{x} = \frac{8}{7}$$

$$\frac{8x}{8} = \frac{140}{8}$$

$$x = 17.5$$

$$\frac{20}{y} = \frac{8}{5}$$

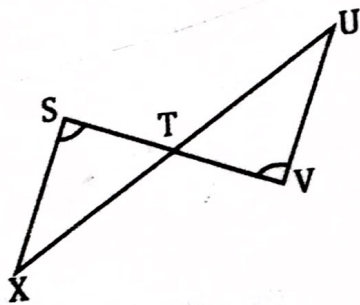
$$\frac{8y}{8} = \frac{100}{8}$$

$$y = 12.5$$

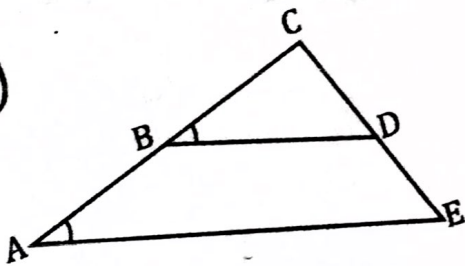
C-Level: State if the 2 triangles are Similar & why. State similarity Statement.

B-Level: Make a Flow Chart to Justify your Answer

①

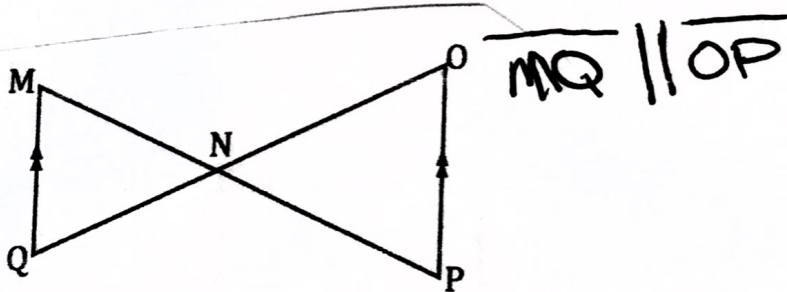


②

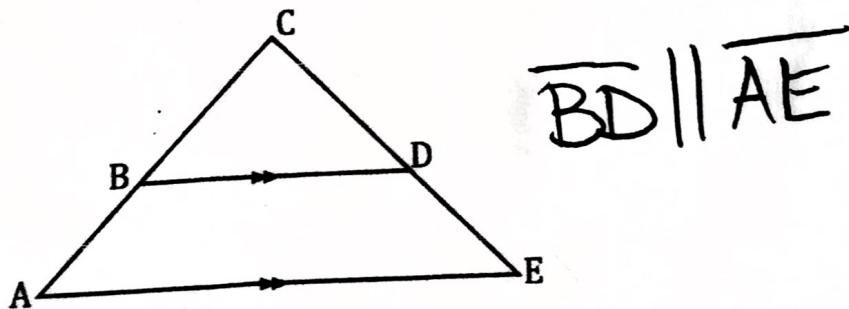


\* Draw as 2 separate triangles on your own paper, if needed

③

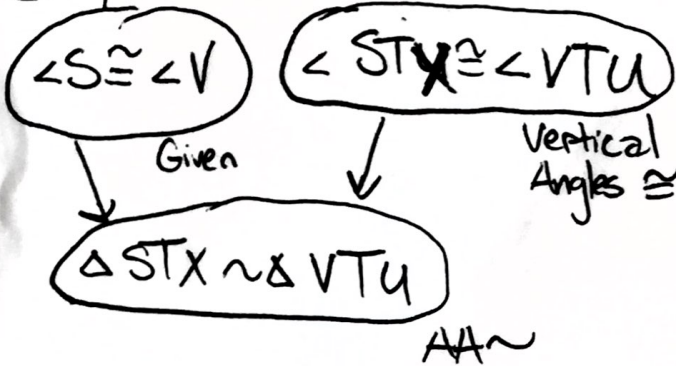


④

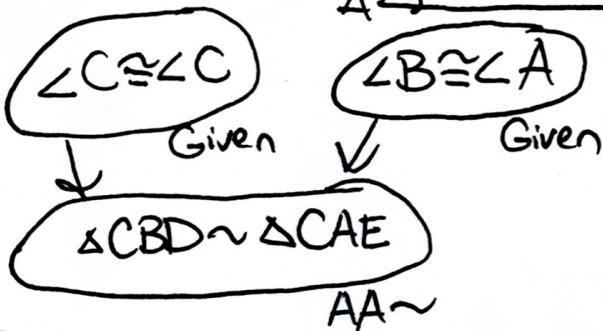
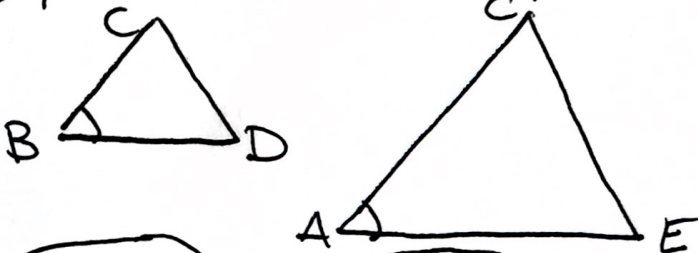


① Yes.  $\triangle STX \sim \triangle VTU$ , AA~

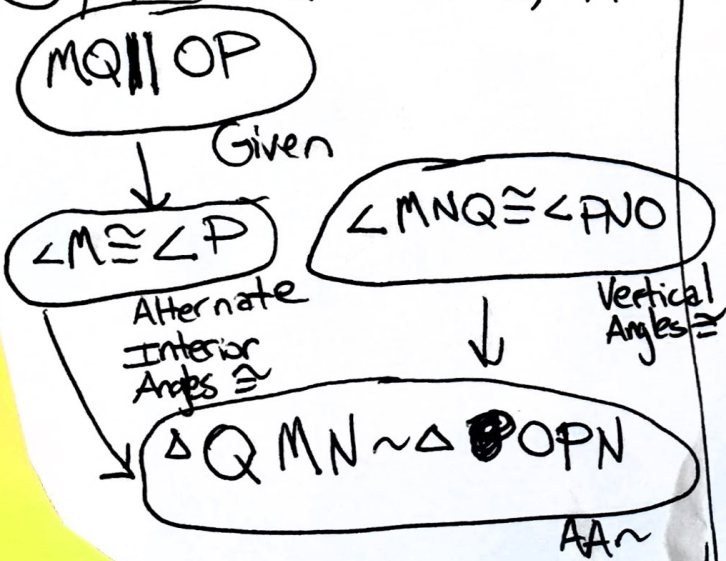
Answers



② Yes.  $\triangle CBD \sim \triangle CAE$ , AA~



③ Yes.  $\triangle MNQ \sim \triangle PNO$ , AA~



④ Yes.  $\triangle CBD \sim \triangle CAE$ , AA~

