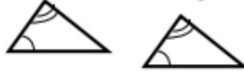


AA

Similarity



If **two angles** of one triangle are **congruent** to two angles of another triangle, then the triangles are *similar*.

SAS

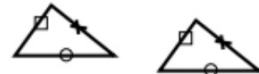
Similarity



In two triangles, if a pair of corresponding **angles is congruent** and the **sides** including the angle are **proportional**, then the triangles are *similar*.

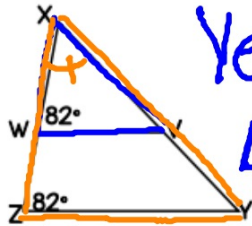
SSS

Similarity



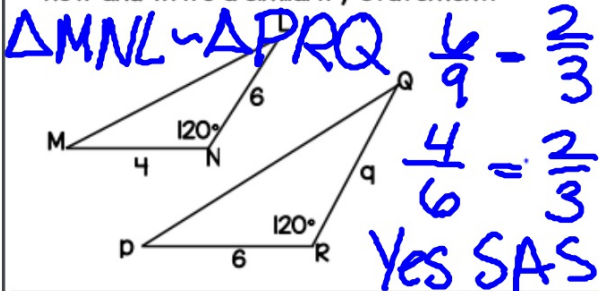
If all **three pairs** of corresponding sides of two triangles are **proportional**, then the two triangles are *similar*.

EX 1: Are the two triangles similar? If so, state how and write a similarity statement.



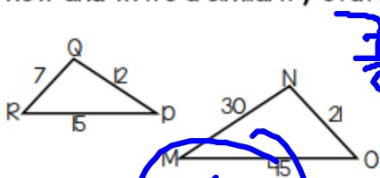
Yes by AA
 $\triangle WXY \sim \triangle ZXY$

EX 3: Are the two triangles similar? If so, state how and write a similarity statement.



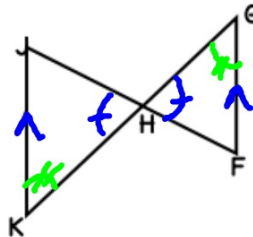
$\triangle MNL \sim \triangle PRQ$
 $\frac{6}{9} = \frac{2}{3}$
 $\frac{4}{6} = \frac{2}{3}$
 Yes SAS

EX 5: Are the two triangles similar? If so, state how and write a similarity statement.



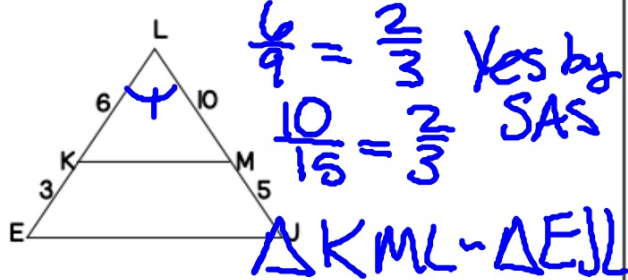
$\frac{7}{21} = \frac{1}{3}$
 $\frac{12}{30} = \frac{2}{5}$
 No

EX 2: Are the two triangles similar? If so, state how and write a similarity statement.



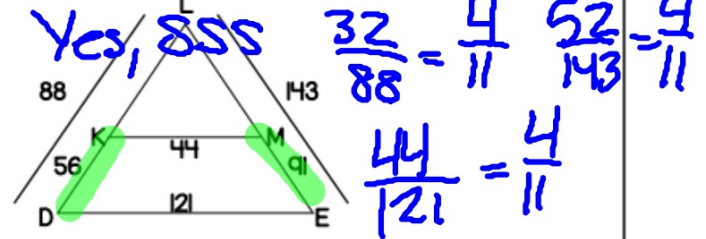
Yes by AA
 $\triangle KGH \sim \triangle JHF$

EX 4: Are the two triangles similar? If so, state how and write a similarity statement.

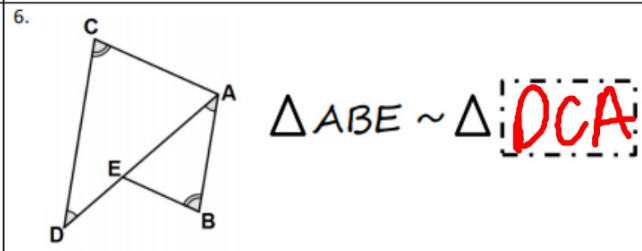
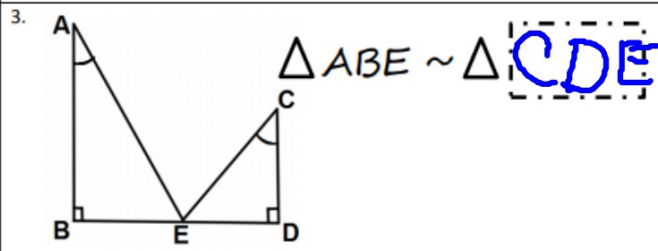
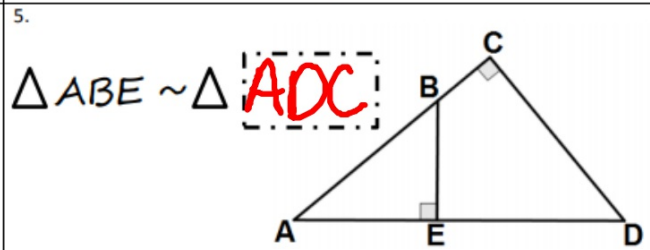
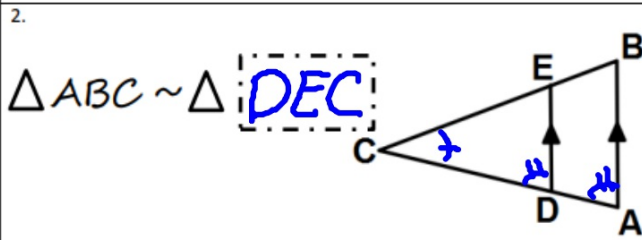
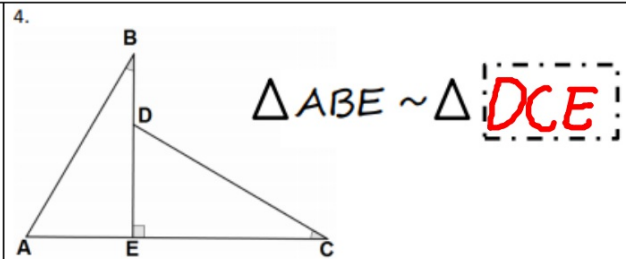
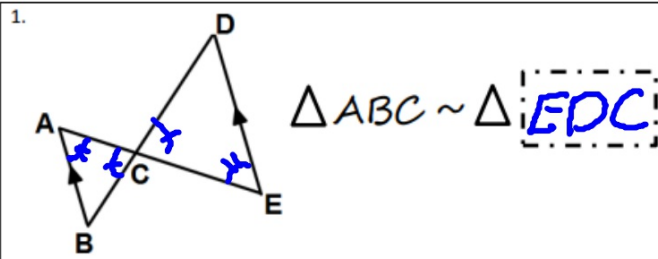


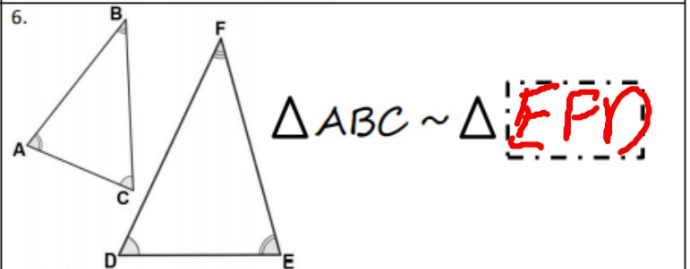
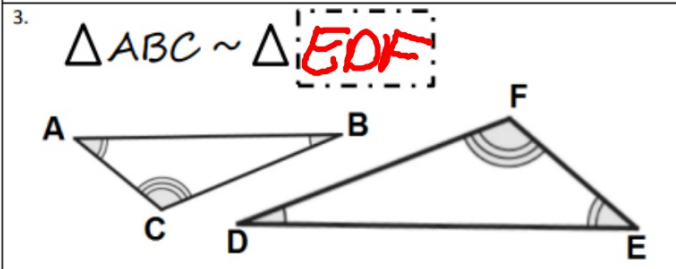
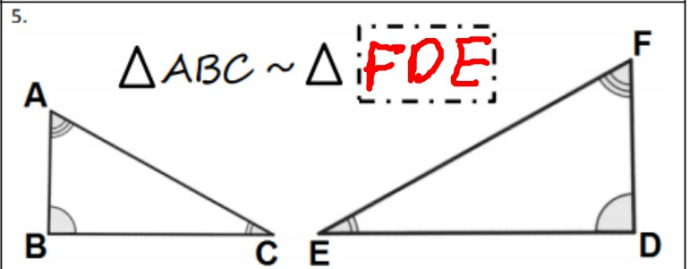
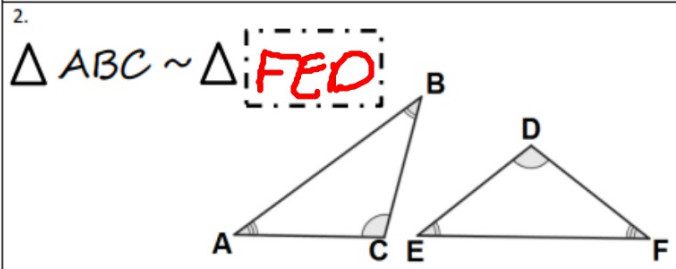
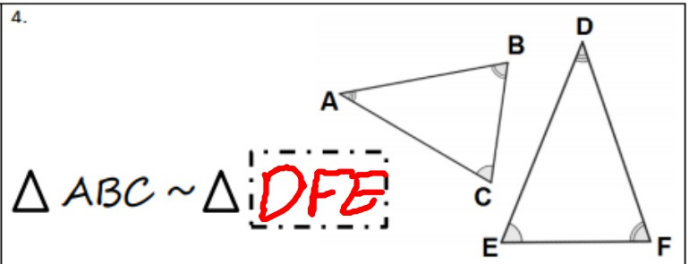
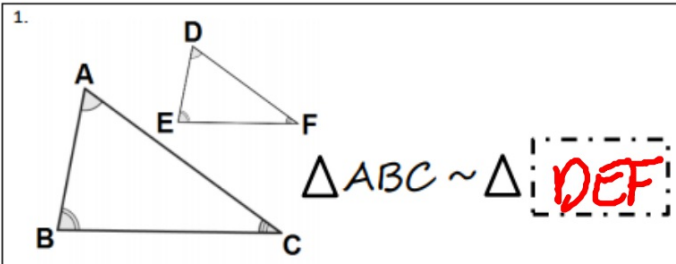
$\frac{6}{9} = \frac{2}{3}$ Yes by SAS
 $\frac{10}{15} = \frac{2}{3}$
 $\triangle KML \sim \triangle LEJ$

EX 6: Are the two triangles similar? If so, state how and write a similarity statement.



Yes, SSS
 $\frac{32}{88} = \frac{4}{11}$
 $\frac{52}{143} = \frac{4}{11}$
 $\frac{44}{121} = \frac{4}{11}$





First complete the sort by decided which theorem or postulate can you used to prove the triangles are similar. Then list the number of the card below.

AA~	SAS~	SSS~	Can't prove similarity
	1		

<p>1</p>	<p>20</p>	<p>3</p>
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Homework is Page 2 in Packet