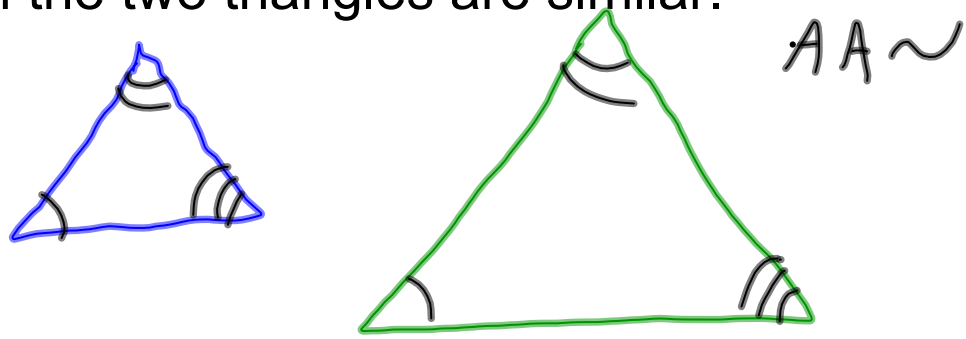
Chapter 6.4: Prove Triangles Similar by AA

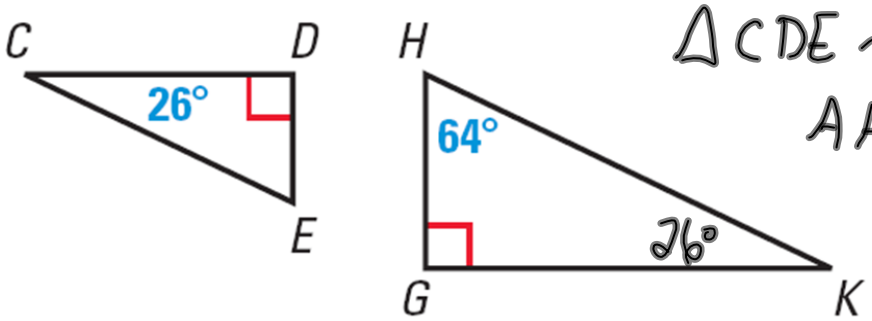
∠'s are ≅, sides are proportional

Axiom 22: If two angles of one triangle are congruent to two angles of another triangle, then the two triangles are similar.



AA ~

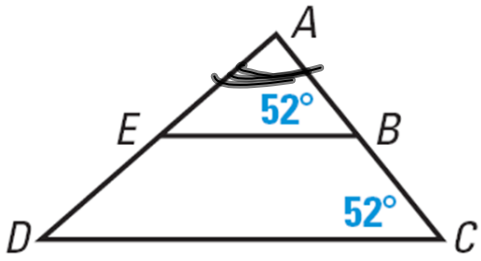
Determine whether the triangles are similar. If they are, write a similarity statement. Explain your reasoning.



△CDE ~ △KGH

AA ~

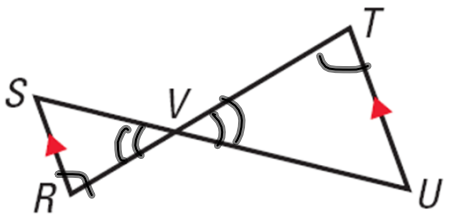
Show that the two triangles are similar



$\angle ABE \cong \angle ACD = 52°$

$\angle EAB \cong \angle DAC$ reflexive

$\triangle EAB \sim \triangle DAC$ AA~



$\angle SRU \cong \angle UTV$ alt int

$\angle SVR \cong \angle UVT$ vert $\angle$'s

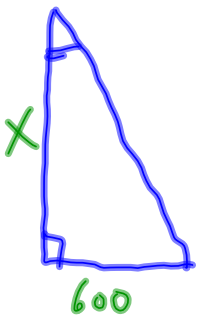
$\triangle SVR \sim \triangle UVT$

A flagpole casts a shadow that is 50 feet long. At the same time, a woman standing nearby who is five feet four inches tall casts a shadow that is 40 inches long. How tall is the flagpole to the nearest foot?

(A) 12 feet (B) 40 feet

(C) 80 feet (D) 140 feet

$\frac{x}{64} = \frac{600}{40}$



Homework: Chapter 6.4

~~pg.384 #'s 4-16e, 20,32~~

Worksheet