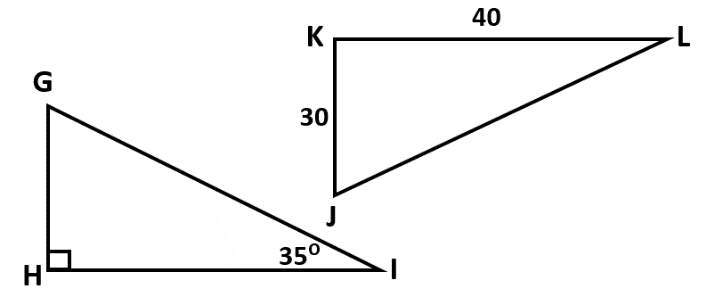
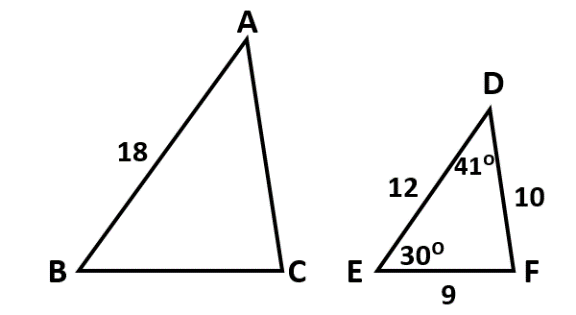
**4.3 HW Congruent Versus Similar Triangles Geometry**

**Directions: Find the information given each set of figures.**

1) ∆ABC ~ ∆DEF 2) ∆GHI ∆JKL



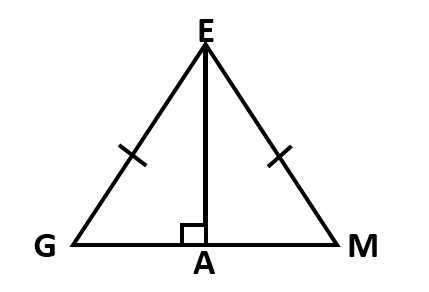
a) What is mA? \_\_\_\_\_\_\_\_\_\_\_\_ a) What is mK? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

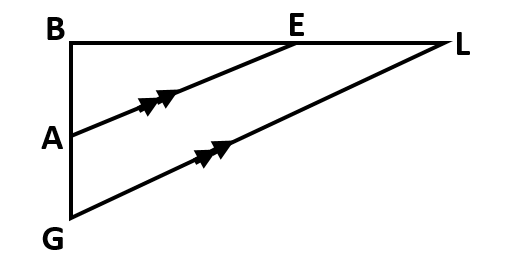
b) What is AC? \_\_\_\_\_\_\_\_\_\_\_\_ b) What is JL? \_\_\_\_\_\_\_\_\_\_\_\_\_

c) What is mC? \_\_\_\_\_\_\_\_\_\_\_ c) What is GI? \_\_\_\_\_\_\_\_\_\_\_\_\_

d) What is BC? \_\_\_\_\_\_\_\_\_\_\_\_\_ d) What is mJ? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Directions: Use the given information to complete each statement.**

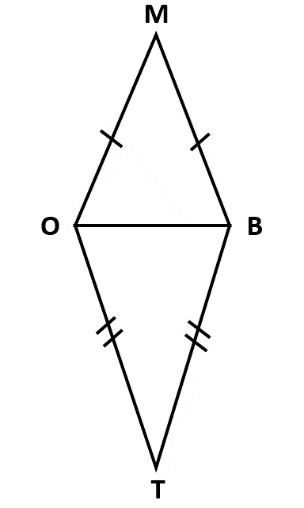
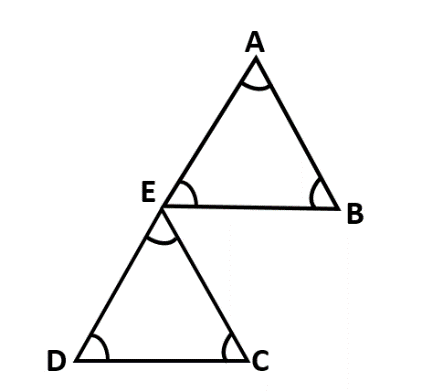


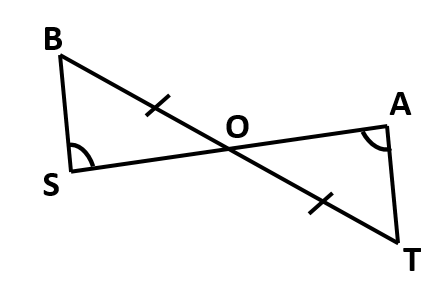
3) 4)

a) ∆AGE ∆\_\_\_\_\_\_\_\_\_ by \_\_\_\_\_\_\_\_\_ a) ∆ABE ~ ∆\_\_\_\_\_\_\_\_\_ by \_\_\_\_\_\_\_\_\_

b) EGA \_\_\_\_\_\_\_ because of \_\_\_\_\_\_\_\_\_\_\_ b) so ? represents this segment \_\_\_\_\_

**Directions: Determine whether there is enough information to prove whether the triangles are similar or congruent. If so, state the theorem or postulate that can be used to prove they are congruent. If not, write neither.**

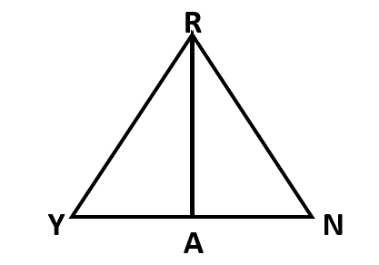


5) 6) 7)

8) Given: RA is an altitude

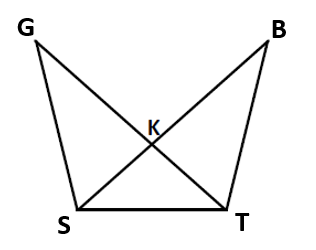
RYA RNA

Prove: ∆RYA ∆RNA



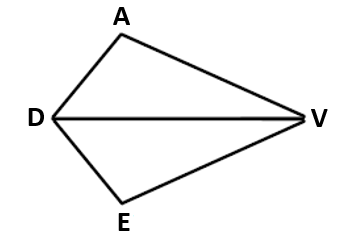
9) Given:

∆SKT is isosceles with as the vertex angle

 Prove: ∆SGT ~ ∆TBS

10) Given: AV = EV

bisects AVE

 Prove: DE = AD