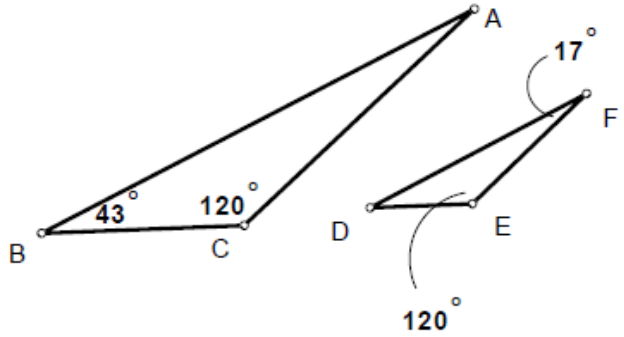
First name: _____ Last name:_____ ID: _____

Similar Triangles 1 Homework

1. Determine if each pair of triangles is similar. If they are similar, complete the similarity statement and state the method used to prove the similarity.

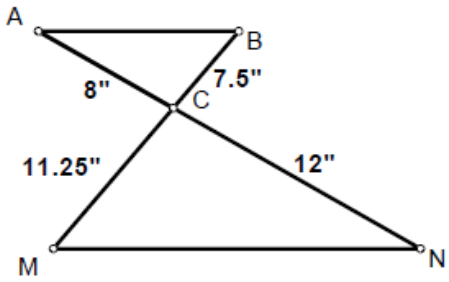
1)

△ABC ~ △_____ by _____



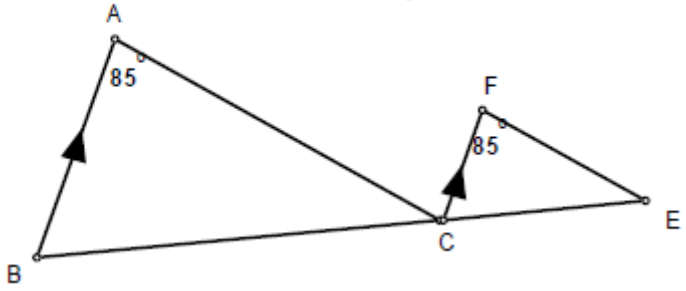
2)

△ABC ~ △_____ by _____



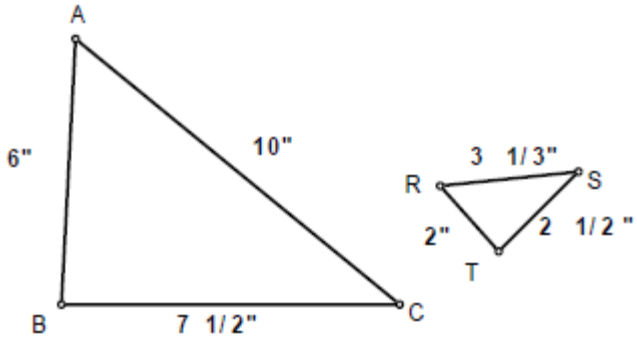
3)

3) △ABC ~ △_____ by _____



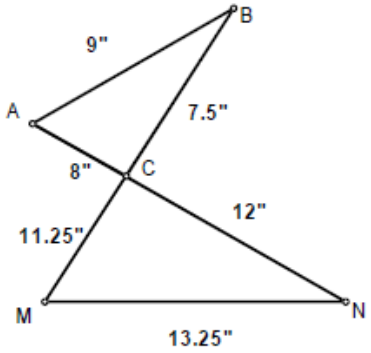
4)

△ABC ~ △_____ by _____



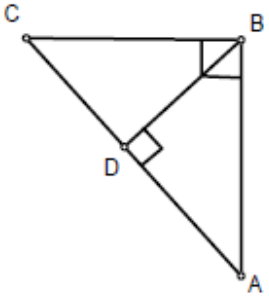
5)

△ABC ~ △_____ by _____



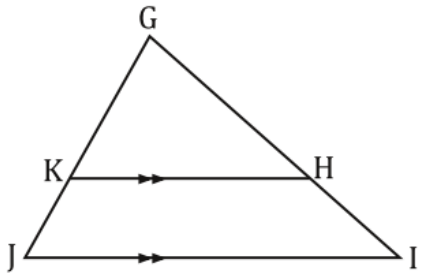
6)

△ABC ~ △_____ by _____
△ABC ~ △_____ by _____



2.

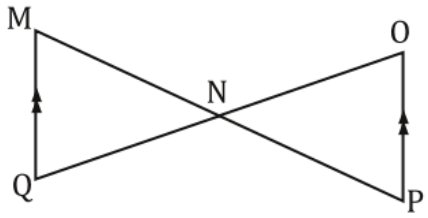
Given: JI||KH



Prove: △JGI~△KGH

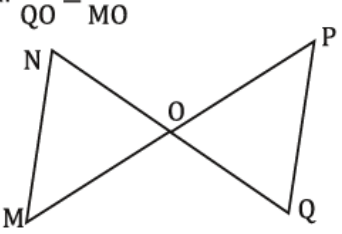
3.

Given: $\overline{MQ}\|\overline{OP}$



Prove: △MNQ~△PON

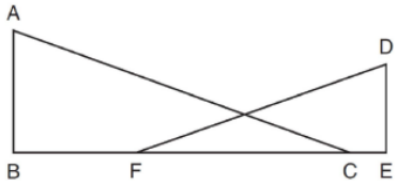
4. Given: $\frac{NO}{QO}=\frac{PO}{MO}$



Prove: △MNO~△PQO

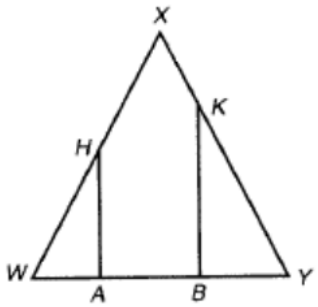
5. Find the value of x that makes ΔABC ~ΔDEF.

6. In the diagram below, AB and DE are perpendicular to BE, $\angle BFD = \angle ECA$
Prove that $\Delta ABC \sim \Delta DEF$



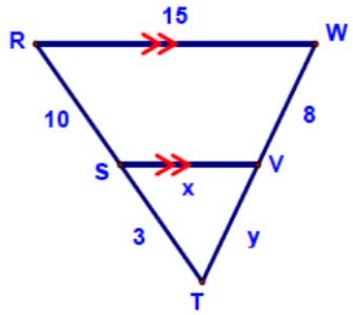
7.

Given: $\overline{XW} \cong \overline{XY}$,
$\overline{HA} \perp \overline{WY}$, $\overline{KB} \perp \overline{WY}$
Prove: $\triangle HWA \sim \triangle KYB$.



8. Solve for unknowns.

a)



b)