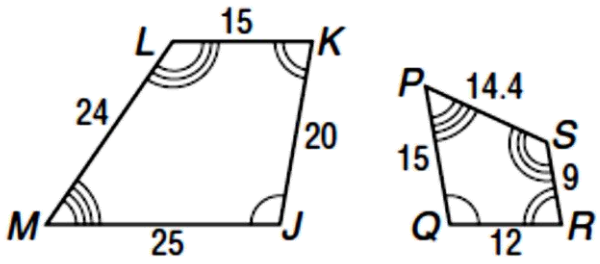
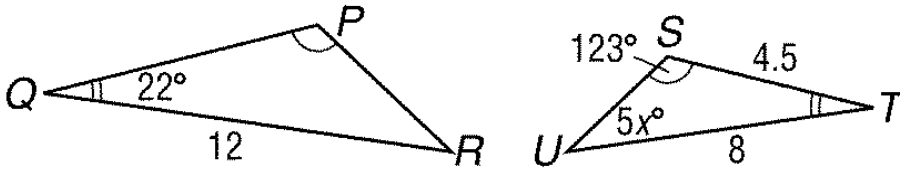
Similarity Review 2020 Remote Learning

1. Determine if the figures below are similar. Explain why or why not.



2. Given $\Delta STU \sim \Delta PQR$, find x.

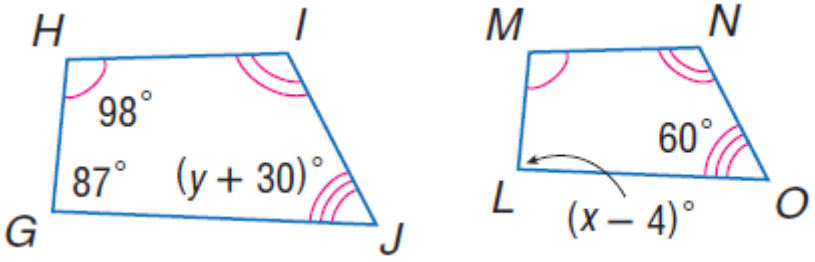


x = _____

3. Given Quadrilateral HIJG ~ Quadrilateral MNOL, find x and y.

x = _____

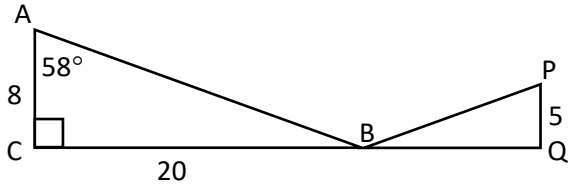
y = _____



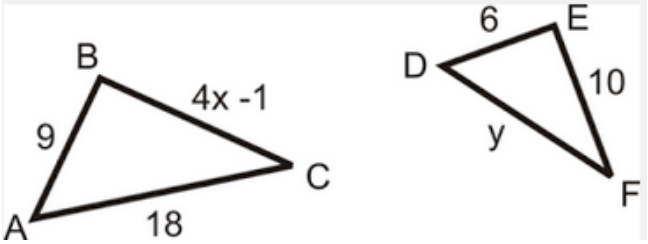
4. ΔABC ~ ΔPBQ. Find ∠PBQ and BQ. Round to the nearest tenth.

∠PBQ = _____

BQ = _____



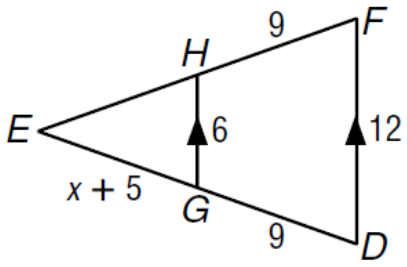
5. If $\Delta ABC \sim \Delta DEF$, *find the perimeter of* ΔABC. What is the ratio of ABC to DEF?



Perimeter of ABC = _____

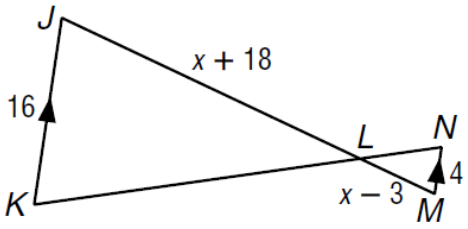
6. Identify the Similar triangles, how you know they are similar, find the variable(s) and the measures of the indicated sides.

$\overline{EH}$ and $\overline{EF}$



7. Identify the Similar triangles, how you know they are similar, find the variable(s) and the measures of the indicated sides.

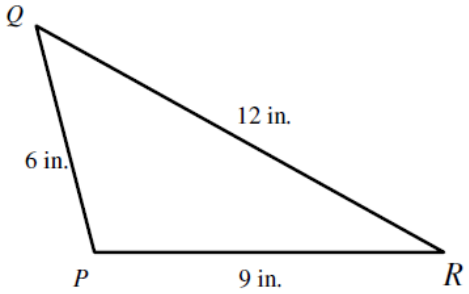
$\overline{JL}$ and $\overline{LM}$

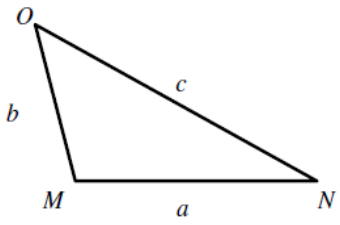


8. A flagpole 5 meters tall casts a 3-meter shadow. At the same time of day, a nearby building casts a 32-meter shadow. How tall is the building?

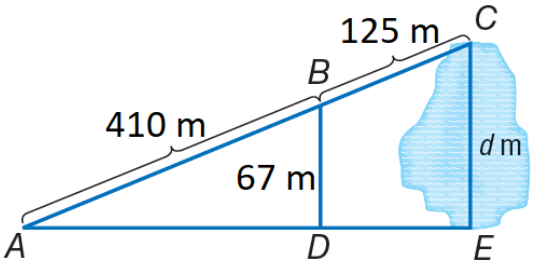
9. $\Delta QPR \sim \Delta OMN$

Find a, b, and c if the perimeter of ΔMON is 18 inches. All measurements are in inches.

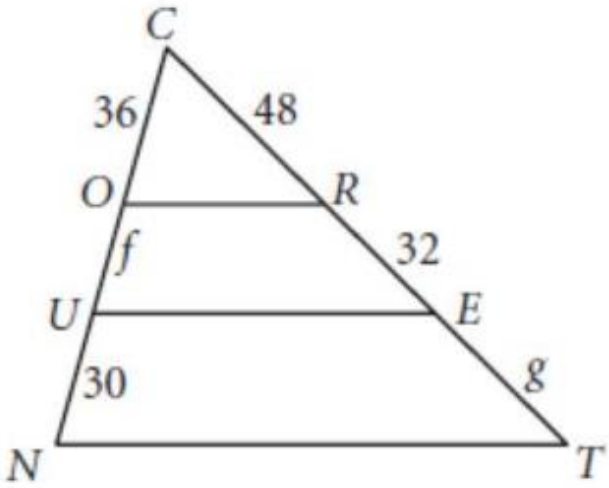




10. In the figure, triangle DBA is similar to triangle ECA. Ramon wants to know the distance across the lake. Find d and round to the nearest hundredth if needed.

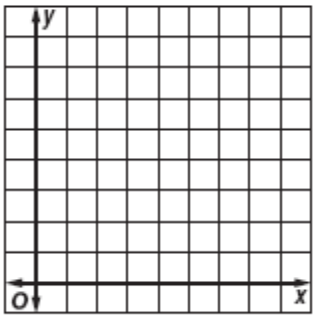


11. OR// UE//NT. Find f and g.

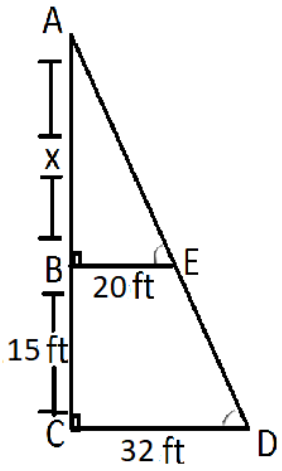


12. Find the image of the polygon, given the vertices, after a dilation centered at the origin with a scale factor of 2, 3, ½, and 1/3.

$J(2, 4), K(4, 4), P(3, 2)$



13. Find x.



14. Given △ABC~△APQ. If the perimeter of ABC is 51in and the perimeter of triangle APQ is 34 in. Find all variables.