

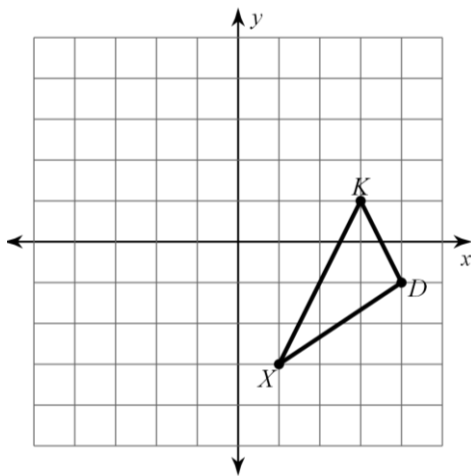
You must show all set up and work for full points.

1) What are the three types of rigid transformations?

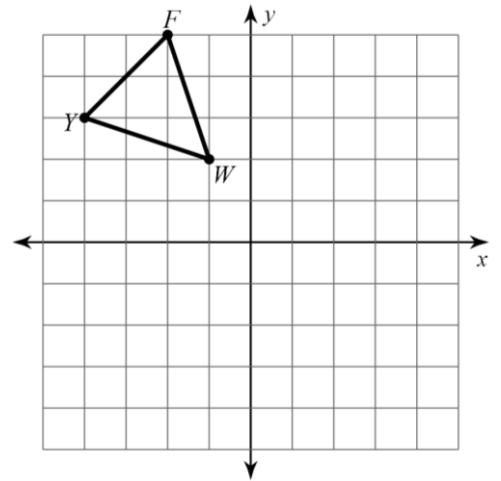
2) Why is a dilation not an isometry?

For problems 3-6, perform the indicated transformation.

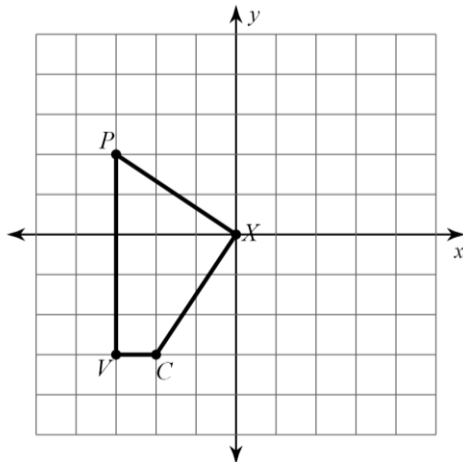
3) translation: 5 units left and 3 units up



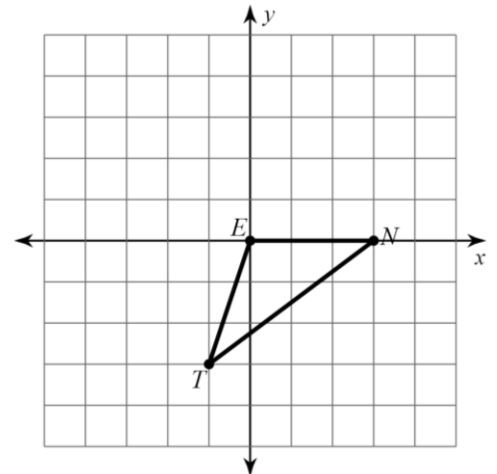
4) rotation 90 degrees counterclockwise about the origin



5) reflection across the x-axis



6) Dilation centered at 0 with a scale factor of  $\frac{1}{2}$



7) What values for the scale factor create an enlargement? Explain.

8) What values for the scale factor create a reduction? Explain.

HOMEWORK

Solve the following proportions.

9)  $\frac{5}{n} = \frac{2}{8}$

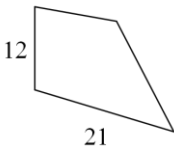
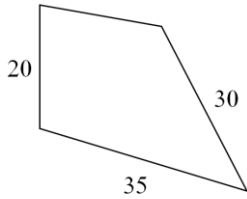
10)  $-\frac{6}{9} = \frac{3}{p}$

11)  $\frac{8}{12} = \frac{b+12}{b-10}$

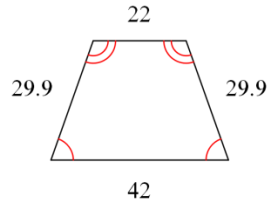
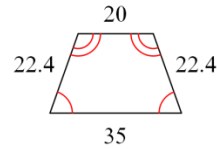
12) Define similar. \_\_\_\_\_

SKILL #8 – SIMILAR FIGURES

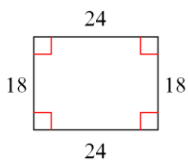
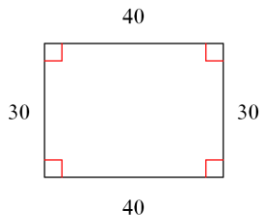
13) The polygons are similar. Find the scale factor of the **larger figure to the smaller figure.**



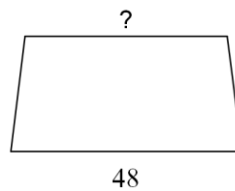
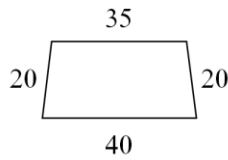
14) State if the polygons are similar. **Show your work as to why or why not.**



15) State if the polygons are similar. **Show your work as to why or why not.**



16) The polygons in each pair are similar. Find the missing side length.

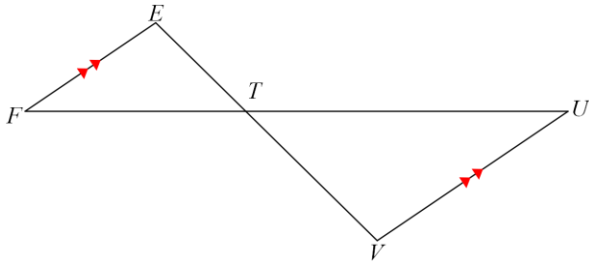


17) How is similarity different from congruence?

18) What are the three triangle similarity shortcuts?

SKILL #9 – TRIANGLE SIMILARITY

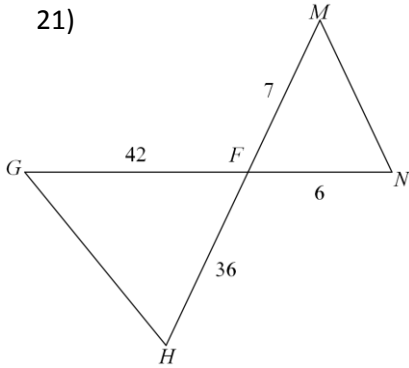
19) The triangles are similar. Complete the similarity statement.



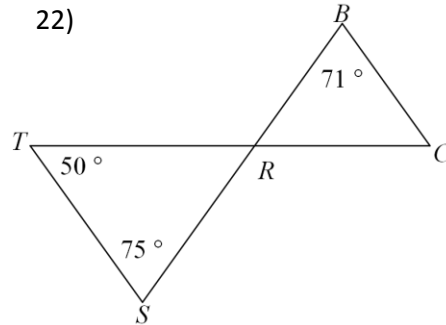
$\Delta TUV \sim$

For 21-24, state if the triangles are similar. If so, state how you know they are similar. If not, explain.

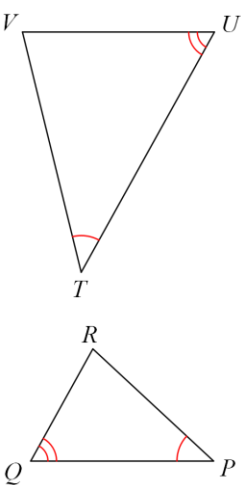
21)



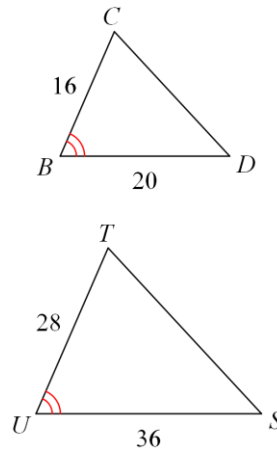
22)



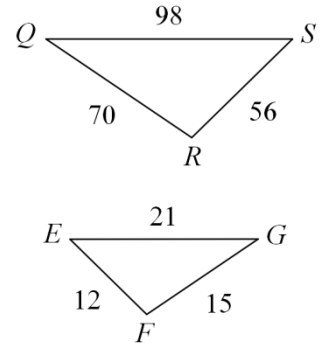
23)



24)

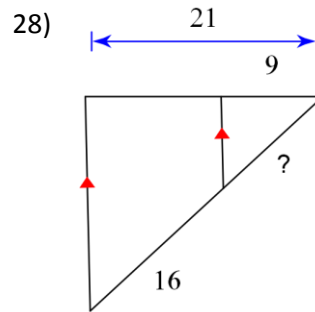
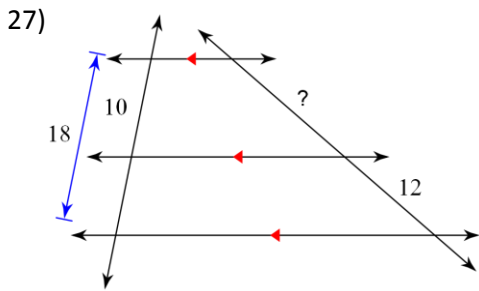
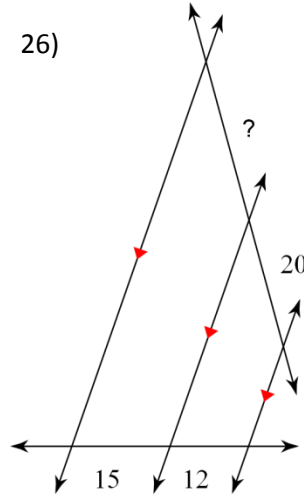
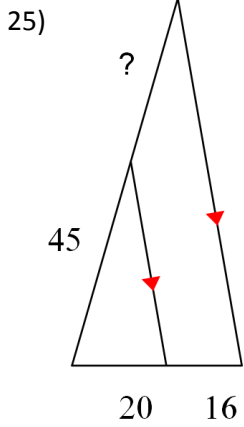


20) State if the triangles are similar. If so, state how you know they are similar. If not, explain.



HOMEWORK

For problems 25-28, solve for the missing side length marked with a question mark.



For problems 29 & 30, solve for  $x$ .

