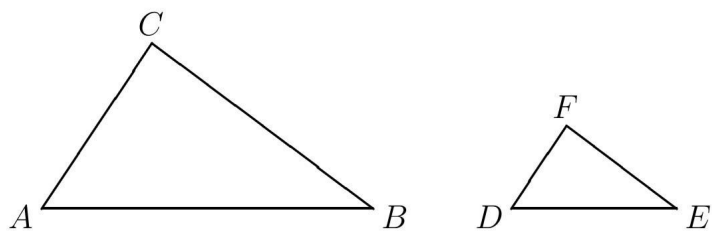


Ratios and Similar Triangles

Complete the following exercises in your math journal.

1. *Try It!*

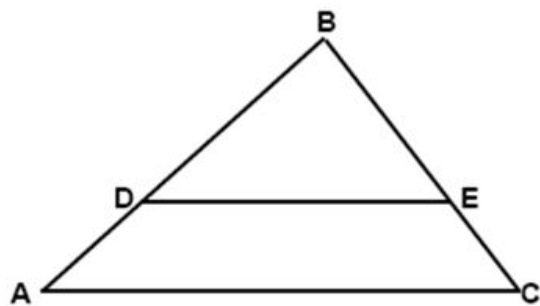
For each pair of triangles, write which sides correspond with each other. Then, write a ratio in fractional form for each relationship. (The first one is done for you!)



\overline{AC} corresponds with \overline{DF} ratio: $\frac{AC}{DF}$

___ corresponds with ___ ratio:

___ corresponds with ___ ratio:



___ corresponds with ___ ratio:

___ corresponds with ___ ratio:

___ corresponds with ___ ratio:

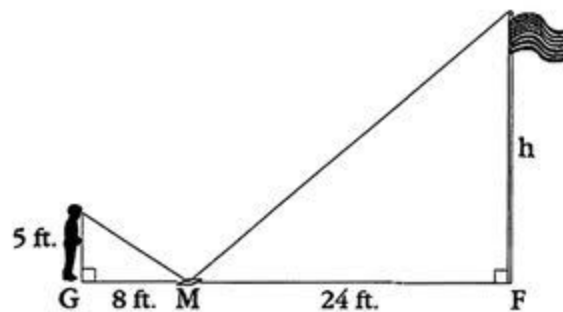
2. *Think About This!*

If I'm standing next to a tree, and the tree and I are both casting shadows, why is it possible for me to find out how tall the tree is? How would you teach someone how to find the height of the tree? Be specific and use a numbered list of steps.

3. *Problem Solving*

- a. The sixth grader below is trying to find out how tall a flagpole is using similar triangles. He believes that if he places a pan of water on the ground, it will act as a mirror. He moves so that he can see the top of the flagpole in the pan, and then measures the distance between him and the pan, and the pan and the flagpole.

Do you think he can determine the height of the flagpole this way? Is there information that might be missing, or does he have everything he needs to solve the problem?



- b. Write the equivalent ratios you need to solve this problem.
c. What is the height of the flagpole? Does your answer make sense?

When you're finished with these exercises, play the Exercise Review Video to see my discussion about them!