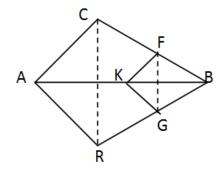
Name: _____

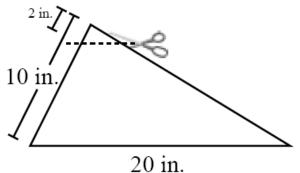
Proportions and Similar Triangles

Exercise 1: In the adjacent figure, K is any point on AB; $KF \parallel AC$ and $KG \parallel AR$.

Prove : $FG \parallel CR$.



Exercise 2: Amy cut the top off of a triangle as shown in the figure below. The cut was parallel to the base and 2 inches from the top as measured along the 10 inch side. How long is the cut if the base of the triangle was 20 inches?



Exercise 3: There is a large tree 80 feet from a house. The owners are worried that the tree might hit their house if it fell. On a sunny day, the tree casts a 60-foot shadow at the same time as a 5-foot tall woman casts a 3-foot shadow. What is the approximate height of the tree?

