## Name:

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## Proportions and Similar Triangles

Exercise 1: In the adjacent figure, $K$ is any point on $A B ; K F \| A C$ and $K G \| A R$.
Prove : $F G \| C R$.


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 5foot tall woman casts a 3 -foot shadow. What is the approximate height of the tree?


