Shirts and Flags

1. On the attached page is a typical clothing pattern for home sewing. The scale of this size 5 shirt pattern is 1:3.
   a. How long is an actual shirt from the back of the neck to the hem (line segment AB)?
   b. What is the distance between button holes?

2. In the size 12 pattern of this shirt, the length of all the edges of the pattern are one and a half times as long as the corresponding edges in the size 5 pattern.
   a. How long is an actual size 12 shirt?
   b. What is the distance between buttonholes on a size 12 shirt?

3. The President of Nepal has been invited as the keynote speaker for your high school graduation. You are responsible for hanging a large Nepalese flag on the wall behind the podium. You need to know the weight of the flag in order to hang it securely.

   Thus far, the flag factory has only sent you a miniature version of the Nepalese flag. It is made out of exactly the same material as the flag you will be hanging, but is only 6 inches high, while the actual flag will be 10 feet high.

   You find that the miniature flag weighs 2 ounces. What is the weight, in pounds, of the actual flag?

the flag of Nepal