

Geometric Sequences

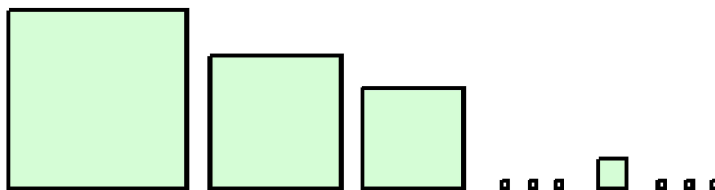
Problem I :

The original box has a diameter of 10cm
 Each earring is 1/10 of the box.
 How many boxes included inside one another
 can be seen until the diameter of the box
 is less than .5 mm. ?



Problem II :

The original square has a side of 10 cm.
 Each square has a side $\frac{3}{4}$ of the previous one.
 What is the total area covered by this infinite
 series of squares ?



Problem III :

Each bar is a half of the previous one.
 What is the total length if we top them up ?

