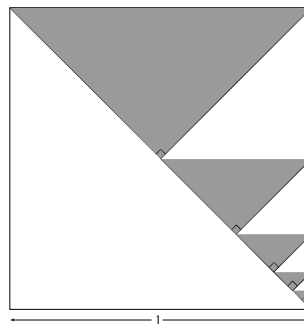
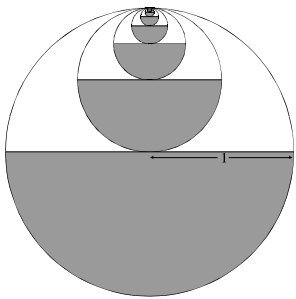


1. Show how to find  $S_n = \sum_{k=0}^{n-1} ar^k$ . Under what conditions will the sequence  $\{S_n\}$  converge as  $n \rightarrow \infty$ ?

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