



## DENSE SETS

### Why

#### Definition

Consider a metric space. A subset of the base set is *dense* in the base set if every element of the base set is the limit of elements in the subset.

#### Notation

Let  $(A, d)$  be a metric space. Let  $B \subset A$ . Then  $B$  is dense in  $A$  if for each  $a \in A$  there exists  $(b_n)_n$  in  $B$  so that  $b_n \rightarrow a$ .

