

(21)

It is beyond the scope of this course to formalize how the statement $A \subseteq B$ may be proved. However, to illustrate what is required it suffices to show:

For each $x \in A$

there exist sets

$$D_{x,1} \subseteq D_{x,2} \subseteq D_{x,3} \subseteq \dots$$

such that $x \in D_{x,1}$

and
$$\bigcup_{j=1}^{\infty} D_{x,j} \subseteq B$$