
Exercise 2.3

1. The set of natural numbers with three decimal digits.
2. The set of rational points in the closed unit cube.
3. The set of vectors of unit length in three-dimensional euclidean space.
4. The set of hyperbolae in the plane, whose asymptotes are the coordinate axes.

Exercise 2.4

1. $\{\frac{1}{2n+1} : n \in \mathbb{Z}\}$
2. $\{x \in \mathbb{R} - \mathbb{Z} : x^2 \in \mathbb{Z}\}$
3. $\{z \in \mathbb{C} : |re(z)| + |im(z)| \leq 1\}$
4. $\{(x, y, z) \in \mathbb{R}^3 : xyz = 0\}$
5. $\{x \in \mathbb{R} : \sin(2\pi x) = 0\}$