

Exercise 10

Real Numbers List the elements of the given set that are

- (a) natural numbers
- (b) integers
- (c) rational numbers
- (d) irrational numbers

$$\left\{ 1.3, 1.3333\dots, \sqrt{5}, 5.34, -500, 1\frac{2}{3}, \sqrt{16}, \frac{246}{579}, -\frac{20}{5} \right\}$$

Solution

- (a) Natural numbers: $\sqrt{16}$
- (b) Integers: $\sqrt{16}, -500, -\frac{20}{5}$
- (c) Rational numbers: $\sqrt{16}, -500, -\frac{20}{5}, 1.3, 1.3333\dots, 5.34, 1\frac{2}{3}, \frac{246}{579}$
- (d) Irrational numbers: $\sqrt{5}$