

**Exercise 9**

**Real Numbers** List the elements of the given set that are

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

$$\left\{ -1.5, 0, \frac{5}{2}, \sqrt{7}, 2.71, -\pi, 3.1\bar{4}, 100, -8 \right\}$$

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**Solution**

- (a) Natural numbers: 100
- (b) Integers: 0, 100, -8
- (c) Rational numbers: -1.5, 0,  $\frac{5}{2}$ , 2.71,  $3.1\bar{4}$ , 100, -8
- (d) Irrational numbers:  $\sqrt{7}$ ,  $-\pi$