CONCEPT SUMMARY Relations and Functions

WORDS ⟩ A **relation** is any set of ordered pairs.

A relation is a **function** when each input, or element in the domain, has exactly one output, or element in the range.

TABLE ⟩

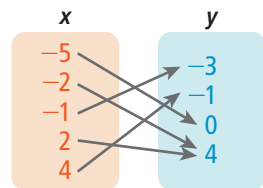| x	−5	−2	−1	2	4
y	0	4	−3	4	−1

Each element in the domain is associated with exactly one element in the range.

NUMBERS ⟩ {(−5, 0), (−2, 4), (−1, −3), (2, 4), (4, −1)}

The domain is the set of x-values. The range is the set of y-values.

DIAGRAM ⟩

Each element in the domain is assigned one element in the range.

GRAPH ⟩