

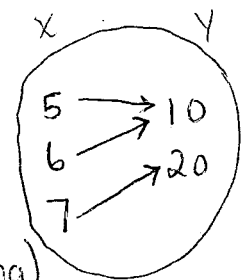
4-2

MIDFP

Relationships Between 2 Quantities

◦ Seven ways to represent a relationship:

- words
- table of values
- set of ordered pairs
- a graph
- an equation
- a mapping (arrow diagram)
- function notation (not for everything)



consider the relation:

"The distance d travelled varies based on the time t spent driving"

◦ 2 variables: d and t

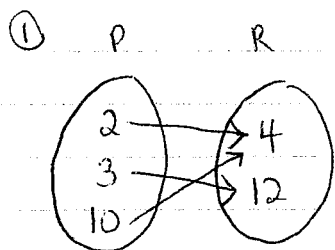
d : dependent variable (depends on time)
graph along y-axis
called the "output"
makes up the range (possible y-values)

t : independent variable
graph along x-axis
called the "input"
makes up the domain (possible x-values)

dependent \rightarrow $d = 95t$ \leftarrow independent

Ex. For each representation, state the :

- a) independent variable
- b) dependent variable
- c) list inputs
- d) list outputs



- a) P
- b) R
- c) 2, 3, 10
- d) 4, 12

②

n	C
10	150
20	300
30	450

- a) n
- b) C
- c) 10, 20, 30
- d) 150, 300, 450

③ $\{^1(x, y), (1, -7), (2, -8), (3, -9)\}$

- a) x
- b) y
- c) 1, 2, 3
- d) -7, -8, -9