

## Definition of a Function

1. For each situation decide (i) is  $A$  a function of  $B$ ? (ii) is  $B$  a function of  $A$ ?

- a.  $A$  is the height above ground of a passenger on a Ferris Wheel  $B$  minutes into the ride.
- i) yes ii) no
- b.  $A$  is the number of years after the year 2000 and  $B$  is the population of Easthampton.
- i) no ii) yes
- c.  $A$  is the temperature of a room in Fahrenheit degrees and  $B$  is the temperature of the room at the same time in Celsius degrees.
- i) yes ii) yes
- d.  $A$  is the area of a square whose side has length  $B$ .
- i) yes ii) yes

2. For each table of values decide if (i)  $A$  is a function of  $B$  or (ii)  $B$  a function of  $A$  or (iii) neither.

a.

$A$	3	6	2	-8	10
$B$	5	6	7	8	2
i and ii. $A$ is a function of $B$ and $B$ is a function of $A$					

b.

$A$	1	2	3	4	5
$B$	1	2	3	4	5
i and ii. $A$ is a function of $B$ and $B$ is a function of $A$					

c.

$A$	2	3	4	5	6
$B$	5	-5	5	-5	5
ii. $B$ is a function of $A$ but $A$ is not a function of $B$					

d.

$A$	1	2	3	2	1
$B$	-5	-6	-7	-8	-2
ii. $A$ is a function of $B$ but $B$ is not a function of $A$					