

# ALGEBRA 1

## Chapter 1, Section 7

### An Introduction to Functions

#### VOCABULARY:

• Input (Domain) –
• Output (Range) –
• Function (Rule) –
• Input/Output Table –

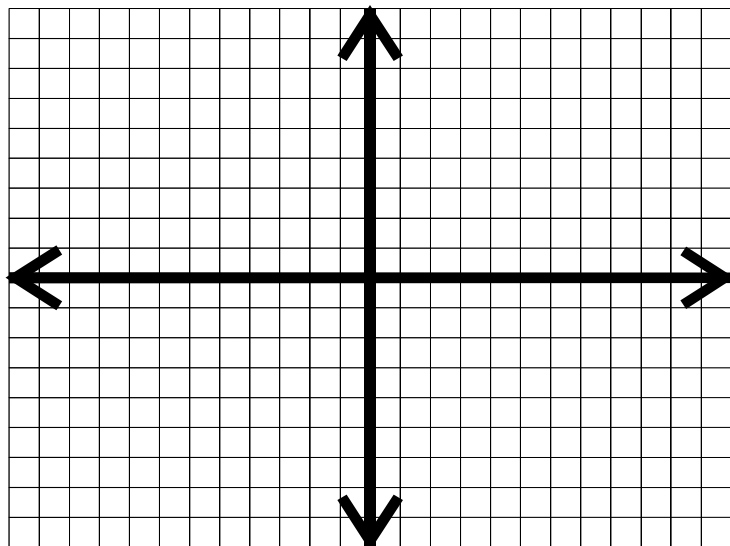
#### GOALS:

- Identify a function.
- Make an input-output table for a function.

1. Example: – You bicycle 4 miles and decide to ride for 2.5 more hours at 6 miles per hour. The distance you have traveled  $d$  after  $t$  hours is given by  $d = 4 + 6t$ , where  $0 \leq t \leq 2.5$ .

A. Make an input-output table for inputs  $t$  and outputs  $d$ . Then draw a line graph.

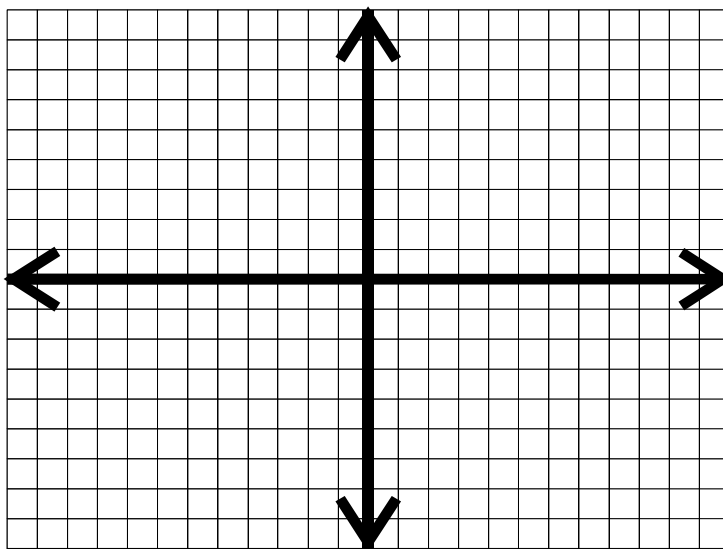
$t$	$d$



2. Example: – The profit on the school play is \$4 per ticket minus \$280, the expense to build the set. There are 300 seats in the theater. The profit for  $n$  tickets sold is  $p = 4n - 280$  for  $70 \leq n \leq 300$ .

A. Make an input-output table for inputs  $n$  and outputs  $p$ . Then draw a line graph.

$n$	$p$



B. Is this a function?

C. Describe the domain and range.