



## Constructing Functions from Tables (page 1)

*For each problem, determine the rate of change and initial value. Where applicable, interpret the rate of change and initial value in term of the situation. Write a function to represent the situation.*

1. Marlene is planning on inviting some friends to an ice skating rink. There is a party fee plus an additional charge for each guest. The table shows the cost.

Number of Guests	Total Cost (\$)
1	42
2	44
3	46
4	48
5	50

Rate of change:

Interpretation:

Initial value:

Interpretation:

Function:

2. The table shows how much money Desean has saved. Assume the relationship between the two quantities is linear.

Number of Months	Money Saved (\$)
4	140
6	170
8	200
10	230

Rate of change:

Interpretation:

Initial value:

Interpretation:

Function:

3. The table of values represents a linear function.

Rate of change:

$x$	$y$
-2	7
1	1
3	-3

Initial value:

Function:

## Constructing Functions from Tables (page 2)

4. A pottery studio charges a certain amount per hour. There is also a fee to fire the pottery. The table show the total cost for different amounts of time.

Number of Hours	Total Cost (\$)
2	75
5	105
8	135

Rate of change:

Interpretation:

Initial value:

Interpretation:

Function:

5. The table show the monthly cost of sending text messages. Assume the relationship between the two quantities is linear.

Number of Messages	Total Cost (\$)
5	20.25
6	20.30
7	20.35

Rate of change:

Interpretation:

Initial value:

Interpretation:

Function:

6. The table of values represents a linear function.

$x$	$y$
-2	1
2	3
4	4

Rate of change:

Initial value:

Function:

