

TWMM-TABLE/GRAFH/EQUATION**Short Answer**

1. Given one of the representations below, find the other two.

Table	<table border="1"> <thead> <tr> <th>x</th><th>y</th></tr> </thead> <tbody> <tr> <td>-2</td><td>14</td></tr> <tr> <td>0</td><td>8</td></tr> <tr> <td>1</td><td>5</td></tr> <tr> <td>2</td><td>2</td></tr> <tr> <td>3</td><td>-1</td></tr> </tbody> </table>	x	y	-2	14	0	8	1	5	2	2	3	-1		
x	y														
-2	14														
0	8														
1	5														
2	2														
3	-1														
Graph															
Equation			$y = \frac{1}{3}x + 1$												

- a. Find the y-intercept for each representation above.
 b. Find the slope for each representation above.

The Grant Center for Outdoor Education gives student groups experience in studying nature and helping to restore the environment for fish, birds, and animals.

2. The budget for the Grant Center assumes a linear relationship between the number of student visitors and daily operating cost. Some sample (*number of students, operating cost*) values are given in the next table.

Number of Students	0	10	20	40
Daily Operating Cost (\$)	450	600	750	1050

write the linear equation represented by the table.

3. Jamal and Alisha played a round of miniature golf. They made some notes of the time it took to play. Their data are shown in the next table:

Hole Number	3	6	9	12	15	18
Time Since Start (minutes)	7	13	20	27	32	40

write the linear equation represented by the table

4. Each table in i-v below represents a linear relationship. write the linear equation to represent each table.

i.

x	y
0	0
1	2.5
2	5
3	7.5
4	10

ii.

x	y
0	6
1	7
2	8
3	9
4	10

iii.

x	y
0	-1.5
1	1.5
2	4.5
3	7.5
4	10.5

iv.

x	y
0	3
1	-1
2	-5
3	-9
4	-13

v.

x	y
1	1
2	5
3	9
4	13
5	17

5. Match a table (A–D) with a graph (E–H) and an equation (I–L). List your results below in four groups. For example, on the line for group 1 you should put 3 letters, one for a table, one for a graph and one for an equation which all represent the same linear pattern.

Group 1: _____

Group 2: _____

Group 3: _____

Group 4: _____

A.

x	y
-2	-5
-1	-3
0	-1
1	1
2	3

B.

x	y
-2	3
-1	2
0	1
1	0
2	-1

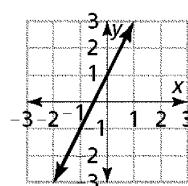
C.

x	y
-2	1.5
-1	1.5
0	1.5
1	1.5
2	1.5

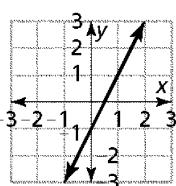
D.

x	y
-2	-3
-1	-1
0	1
1	3
2	5

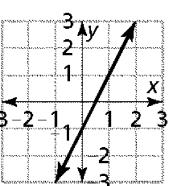
E.



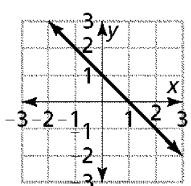
F.



G.



H.



I. $y = 1.5$

J. $y = 2x - 1$

K. $y = 2x + 1$

L. $y = -x + 1$

write the linear equation represented by each table.

6.

Time (hours)	Distance (miles)
4	260
6	390
8	520
10	650

7.

Time (hours)	Distance (miles)
4	164
6	246
8	328
10	410

8.

Time (hours)	Distance (miles)
4	184
6	276
8	368
10	460

Multiple Choice*Identify the choice that best completes the statement or answers the question.*

X	1	2	3	4
Y	4	7	10	13

____ 9. What is the equation to represent the data set?

- a. $y = x + 3$ c. $y = 3x + 1$
b. $y = 4x + 1$ d. $y = 3x + 13$