## **Patterns and Graphing**

Ron makes \$5 every hour. A rule like this can be used to create a data table. The data can be plotted on a coordinate grid.

How to graph an rule:

#### Step 1:

Name three *x*-coordinates. Use the rule, substituting each *x*-coordinate to calculate each *y*-coordinate. Put the ordered pairs into the table.

#### Step 2:

Use grid paper. Choose an interval for each axis. Label and number the axes.

Choose the starting point and ending point for each axis.

### Step 3:

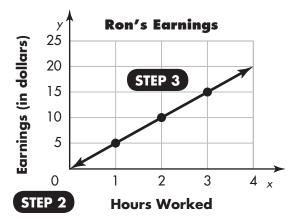
Graph the data by using the coordinates for each set of data as a point. Connect all the points in a straight line. Title your graph.

**1.** Graph the points from the table below to show the cost of buying harmonicas. Let *x* equal the number of harmonicas, and let *y* equal the cost of each harmonica. Harmonicas are available online for \$3 each, plus a single shipping charge of \$2.

y=3x+2				
X	У			
1	5			
2	8			
3	11			

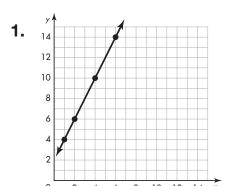
STEP 1

y = 5x						
x-Hours	y-Earnings					
0	0					
1	5					
2	10					
3	15					

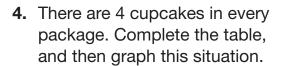


# **Patterns and Graphing**

In 1 and 2 create a data table from the points plotted on the graph.



**3.** Janice is 7 years older than Tam. Complete the table, and then graph this situation.



5. Tickets to the River Dell Middle School concert cost \$6 apiece. Complete the table, and then graph this situation.

	y A	1												
2.	14				-									
	12				-									
	10				-									
	8				1				F					
	6				+	-	H					7		
	4				1		•							
	2		4	ø										
									Ļ					
	Ω		2	4		6	Ω	1	Ω	- 1	2	1	1	

Tam x (years)	Janice y (years)
2	9
4	
6	
8	

x (number of packages)	y (number of cupcakes)
1	4
2	
3	
4	
5	

x (tickets sold)	y (money received)
1	\$6
2	
3	
4	
5	

**6.** A graph includes the ordered pair (2, 4). Write two different rules that would be possible for this graph. Explain how you found your answer.