

Name _____ Date _____

Using Tables to Graph Functions

(Pages 433–435)

To graph a function, use a function table to help you write ordered pairs with the domain and range values.

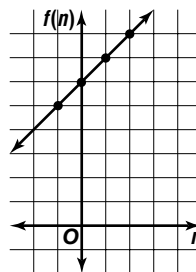
Graphing Functions	<ul style="list-style-type: none"> To form an ordered pair, make the first number (or x-coordinate) in the pair equal to a value of n in the function table. The second number (or y-coordinate) in the pair is the matching value from the table for $f(n)$. To graph, label the x-axis as n and the y-axis as $f(n)$. Then graph each ordered pair on the coordinate grid. Draw the line or curve that the points suggest.
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EXAMPLE

Graph the function $f(n) = n + 6$.

Make a function table.

n	$n + 6$	$f(n)$	$(n, f(n))$
-1	$-1 + 6$	5	$(-1, 5)$
0	$0 + 6$	6	$(0, 6)$
1	$1 + 6$	7	$(1, 7)$
2	$2 + 6$	8	$(2, 8)$



Then graph the ordered pairs. The points lie on a line.

PRACTICE

Complete each function table. Then graph the function.

1. $f(n) = 2n - 4$

n	$f(n)$	$(n, f(n))$
-3		
0		
2		
3.5		
6		

2. $f(n) = n^2$

n	$f(n)$	$(n, f(n))$
-3		
-1		
0		
1		
3		

3. Choose values for n and graph $f(n) = 6 - n$.

4. Choose values for n and graph $f(n) = \frac{n}{2}$.



5. **Standardized Test Practice** If $f(n) = n^2 - 2$, which of these will the graph resemble?

A line

B circle

C U-shape

D rectangle

Answers: 1–4. See Answer Key for graphs. 1. $(-3, -10), (0, -4), (2, 0), (3.5, 3), (6, 8)$ 2. $(-3, 9), (-1, 1), (0, 0), (1, 1), (3, 9)$ 3–4. Tables will vary. 5. C