

Name: _____

Missing Values

Explore the Relationship Among an Equation, a Table, and a Graph

A piece of paper with an incomplete table showing number pairs was left on a student's desk after a mathematics class. Using what you know about patterns, answer these questions:

x	y	(x, y)
2		
3		
4	16	
5	20	
6	24	
7		
8	32	

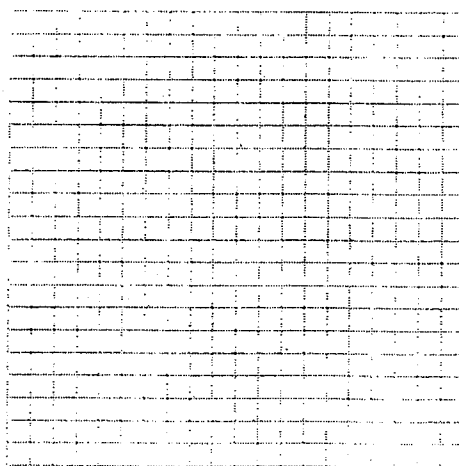
1. Predict the missing values for y, and record them in the table. Describe how you made your predictions. Write each x and y value as an ordered pair.

2. Graph the ordered pairs from the table on the coordinate grid below. Show your scales on both axis.

3. Describe a general rule to help you determine the value for y if you are given the value of x.

4. Use your rule to find the value for y when $x = -1$. Show this point on the line you graphed.

5. Are the following ordered pairs, $(-3, -12)$ and $(10, 42)$, solutions to your general rule? Explain why or why not?



Name: _____

ACE Cab Company

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x (miles)	y (Cab Fare in \$)	(x,y)
0		
1		
2		
3		
4		
5		
6		

The ACE Cab Company charges \$5.00 plus \$.50 a mile for its fare. The total cost for a cab fare can be modeled by the equation $y = .50x + 5$. Use the table provided to determine cab fares for the given miles.

1. Predict the values for y, and record them in the table. Describe how you determined each y value. Write each x and y value as an ordered pair.

2. Graph the ordered pairs from the table on the coordinate grid below. Show your scales on both axis.

3. Are the following ordered pairs, (-3, \$3.50) and (20, \$15.00), solutions to the equation for the cab fare? Explain why or why not?

