LESSON 7-5

Reading Strategies

Finding a Pattern

To write an equation from a table, you need a rule that relates x to y.

x	y
0	−1
1	0
3	2
5	4
6	5

Look for a pattern to describe the relationship between x and y values.

x	y	
$0 - \mathbf{1} = -1$		−1 is 1 less than 0, so subtract 1 from 0 to get −1.
$1 - \mathbf{1} = 0$		0 is 1 less than 1, so subtract 1 from 1 to get 0.
$3 - \mathbf{1} = 2$		2 is 1 less than 3, so subtract 1 from 3 to get 2.
$5 - \mathbf{1} = 4$		4 is 1 less than 5, so subtract 1 from 5 to get 4.
$6 - \mathbf{1} = 5$		5 is 1 less than 6, so subtract 1 from 6 to get 5.

You need a rule that tells you how to find y given x.
The rule is to subtract 1 from x to get y.
So, you can write the equation $y = x - 1$.

Use the table to answer each question.

x	y
−1	−2
1	2
3	6
5	10
6	12

1. What pattern do you see between the x and y values in the table?

The y values are 2 times greater than the x values.

2. What is the rule that tells you how to find y given x?

The rule is to multiply x by 2 to get y.

3. What equation describes the relationship between the values in the table?

$y = 2x$

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