

# REVIEW: Describing Linear Patterns

Name \_\_\_\_\_

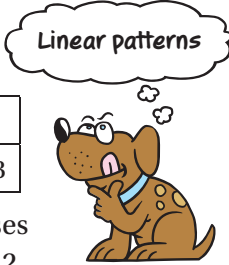
## Key Concept and Vocabulary

Equation:  $y = 2x + 3$

Table:

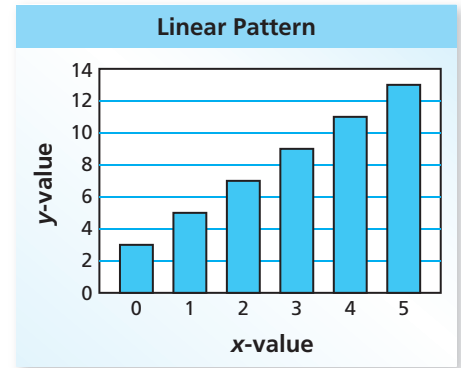
<b>x</b>	0	1	2	3	4	5
<b>y</b>	3	5	7	9	11	13

Words: Each time  $x$  increases by 1,  $y$  increases by 2.



## Visual Model

Moving to the right, each bar increases by 2 units.



## Skill Example

1. Equation:  $y = 15 - 3x$

Table:

<b>x</b>	0	1	2	3	4	5
<b>y</b>	15	12	9	6	3	0

Words: Each time  $x$  increases by 1,  $y$  decreases by 3.

## Application Example

2. The equation  $P = 5t$  describes how much pay  $P$  (in dollars) you earn for working  $t$  hours. Make a table and describe the pattern.

<b>t</b>	1	2	3	4	5	6
<b>P</b>	5	10	15	20	25	30



••• You get paid \$5 an hour.

## PRACTICE MAKES PURR-FECT®

Check your answers at [BigIdeasMath.com](http://BigIdeasMath.com).

Complete the table. Then describe the pattern.

3.  $y = x + 7$

<b>x</b>	0	1	2	3	4	5
<b>y</b>	7	8	9	10	11	12

Each time  $x$  increases by 1,  $y$  increases by 1.

4.  $y = 9 - x$

<b>x</b>	0	1	2	3	4	5
<b>y</b>	9	8	7	6	5	4

Each time  $x$  increases by 1,  $y$  decreases by 1.

5.  $y = 4x + 5$

<b>x</b>	0	1	2	3	4	5
<b>y</b>	5	9	13	17	21	25

Each time  $x$  increases by 1,  $y$  increases by 4.

6.  $y = 90 - 6x$

<b>x</b>	0	1	2	3	4	5
<b>y</b>	90	84	78	72	66	60

Each time  $x$  increases by 1,  $y$  decreases by 6.

Write an equation for the pattern.

7.

<b>x</b>	0	1	2	3	4	5
<b>y</b>	5	14	23	32	41	50

$y = 9x + 5$

8.

<b>x</b>	0	1	2	3	4	5
<b>y</b>	50	40	30	20	10	0

$y = 50 - 10x$

9. **HOURLY PAY** The equation  $P = 7t$  describes how much pay  $P$  (in dollars) you earn for working  $t$  hours. Describe the pattern. You get paid \$7 an hour.