

REVIEW: Linear Patterns

Name _____

Key Concept and Vocabulary

Equation: $y = 2x + 3$

Table:

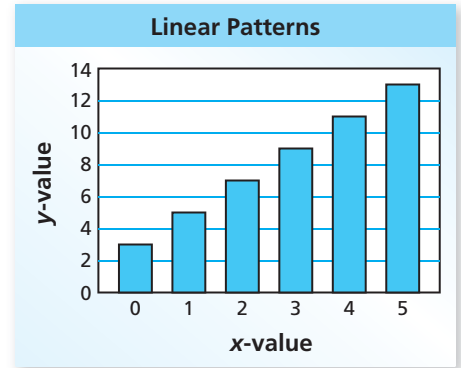
x	0	1	2	3	4	5
y	3	5	7	9	11	13

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:

x	0	1	2	3	4	5
y	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 you earn for working t hours. Make a table and describe the pattern.

t	1	2	3	4	5	6
P	5	10	15	20	25	30

••• You get paid \$5 an hour.

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Check your answers at BigIdeasMath.com.

Complete the table. Then describe the pattern.

3. $y = x + 7$

x	0	1	2	3	4	5
y	7	8	9	10	11	12

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

4. $y = 9 - x$

x	0	1	2	3	4	5
y	9	8	7	6	5	4

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

5. $y = 4x + 5$

x	0	1	2	3	4	5
y	5	9	13	17	21	25

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

6. $y = 90 - 6x$

x	0	1	2	3	4	5
y	90	84	78	72	66	60

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

Write an equation for the pattern.

7.

x	0	1	2	3	4	5
y	5	14	23	32	41	50

$y = 9x + 5$

8.

x	0	1	2	3	4	5
y	50	40	30	20	10	0

$y = 50 - 10x$

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