

Name \_\_\_\_\_ Per \_\_\_\_\_

Mrs. Doolan/ Math6

**EE.9: Using Equations to Describe Patterns in Input/Output Tables**

You can use equations to describe patterns. Input/output tables can help determine a given pattern and help to create an equation.

1. The table shows Bobbi's age,  $b$ , when Timmy,  $t$ , is age 7, 9, and 10. Write a rule and an equation that describes a pattern. Then find Bobbi's age when Timmy is 12.

Timmy's age, $t$	Bobbi's age, $b$
7	2
9	4
10	5
12	



EQUATION: \_\_\_\_\_

In 2 through 5, write a rule and an equation to fit a pattern in each table.

2.

$x$	$y$
1	33
2	34
3	35
4	36

3.

$m$	$n$
1	3
2	6
3	9
4	12

EQUATION: \_\_\_\_\_

EQUATION: \_\_\_\_\_

4.

a	b
3	17
6	20
9	23
12	26

5.

x	y
6	1
12	2
18	3
24	4

EQUATION: \_\_\_\_\_

EQUATION: \_\_\_\_\_

In 6 through 8, use the equation to complete each table.

6.  $t = 5d$

<i>d</i>	0	1	2	3	4
<i>t</i>	0	5			

7.  $b = \frac{a}{2}$

<i>a</i>	16	14	11	8	5
<i>b</i>					

Challenge:

8.  $y = 2x - 7$

<i>x</i>	4	5	6	7	8
<i>y</i>					