

## Finding Formulas from Tables of Values (Inductive Reasoning)

### Answer Key

For each table below, find a formula for  $y$  in terms of  $x$ .

1.

$x$	1	2	3	4	5	6
$y$	7	14	21	28	35	42
$y = 7x$						

1.

$x$	1	2	3	4	5	6
$y$	5	8	11	14	17	20
$y = 3x + 2$						

2.

$x$	1	2	3	4	5	6
$y$	0	-1	-2	-3	-4	-5
$y = -x + 1$						

3.

$x$	1	2	3	4	5	6
$y$	11	15	19	23	27	31
$y = 4x + 7$						

4.

$x$	1	2	3	4	5	6
$y$	3	0	-3	-6	-9	-12
$y = -3x + 6$						

5.

$x$	1	2	3	4	5	6
$x^2$	1	4	9	16	25	36
$y$	5	8	13	20	29	40
$y = x^2 + 4$						

6.

$x$	1	2	3	4	5	6
$x^2$	1	4	9	16	25	36

$y$	7	4	-1	-8	-17	-28
$y = 8 - x^2$						

7.

$x$	1	2	3	4	5	6
$x^2$	1	4	9	16	25	36
$y$	2	6	12	20	30	42
$y = x^2 + x$						

8.

$x$	1	2	3	4	5	6
$x^2$	1	4	9	16	25	36
$y$	4	10	18	28	40	54
$y = x^2 + 3x$						