

# Functions: Lesson 5

## Writing Function Rules: Notes

Name: Answer Key!



Write the function rule for this set of data:

1. Write  $y =$
2. What are the  $y$ 's going up by?  $+2$
3. Put that number in front of the  $x$ .
4. Pick a point and see what needs to be added or subtracted to make it work!

$x$	$y$
1	5
2	7
3	9

$\downarrow +2$   
 $\downarrow +2$

$$y = 2x + 3$$

Check point (2, 7):

Use (1, 5)

$$y = 2x + ?$$

$$5 = 2(1) + ?$$

$$5 = 2 + ?$$

$$3$$

Write the function rule for this set of data:

$x \ y$   
(1, 3)

$$y = 5x + ?$$

$$3 = 5(1) + ?$$

$$3 = 5 + ?$$

$$-2$$

$$y = 5x - 2$$

$x$	$y$
1	3
2	8
3	13

$\downarrow +5$   
 $\downarrow +5$

Write the function rule for this set of data:

$x \ y$   
(1, 7)

$$y = -3x + ?$$

$$7 = -3(1) + ?$$

$$7 = -3 + ?$$

$$10$$

$$y = -3x + 10$$

$x$	$y$
1	7
2	4
3	1

$\downarrow -3$   
 $\downarrow -3$