

Example 2

Use the equation $y = 2x + 3$.

- Describe the relation in words.
- Complete a table of values for $x = 2, 1, 0, -1, -2$.
- Write the ordered pairs.

Solution

- The value of y is two times the value of x , plus 3.
- Find the y -values. Complete the table of values.

$y = 2x + 3$	x	y
$y = 2(2) + 3 = 7$	2	7
$y = 2(1) + 3 = 5$	1	5
$y = 2(0) + 3 = 3$	0	3
$y = 2(-1) + 3 = 1$	-1	1
$y = 2(-2) + 3 = -1$	-2	-1

- The ordered pairs are $(2, 7), (1, 5), (0, 3), (-1, 1)$, and $(-2, -1)$.

Practice

Use each of the following equations.

- Describe the relation in words.
- Copy and complete the table of values.
- Write the ordered pairs.

1. $x + y = 6$

x	y
3	
2	
-1	
0	
-1	

2. $x + y = 2$

x	y
2	
1	
0	
-1	
-2	

3. $x - y = 2$

x	y
6	
5	
4	
3	
2	

4. $x - y = 0$

x	y
3	
2	
1	
0	
-1	

5. For the equation $x + y = 9$, find the missing value in each ordered pair.

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|--------------------|--------------------|
| a) $(3, \square)$ | b) $(7, \square)$ |
| c) $(\square, 2)$ | d) $(\square, 0)$ |
| e) $(-1, \square)$ | f) $(-3, \square)$ |
| g) $(\square, -2)$ | h) $(\square, -7)$ |

6. For the equation $x - y = 1$, find the missing value in each ordered pair.

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|-------------------|--------------------|--------------------|
| a) $(6, \square)$ | b) $(2, \square)$ | c) $(\square, 3)$ |
| d) $(\square, 7)$ | e) $(-1, \square)$ | f) $(\square, -2)$ |

Use each of the following equations.

- Describe the relation in words.
- Copy and complete the table of values.
- Write the ordered pairs.

7. $y = x + 3$

x	y
2	
1	
0	
-1	
-2	

8. $y = x - 1$

x	y
3	
2	
1	
0	
-1	

9. $y = 2x + 1$

x	y
2	
1	
0	
-1	
-2	

10. $y = 3x - 2$

x	y
2	
1	
0	
-1	
-2	

11. For the equation $y = x + 2$, find the missing value in each ordered pair.

- | | | |
|-------------------|-------------------|--------------------|
| a) $(2, \square)$ | b) $(3, \square)$ | c) $(-1, \square)$ |
| d) $(0, \square)$ | e) $(\square, 5)$ | f) $(\square, 0)$ |

12. For the equation $y = x - 3$, find the missing value in each ordered pair.

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|--------------------|-------------------|-------------------|
| a) $(4, \square)$ | b) $(6, \square)$ | c) $(0, \square)$ |
| d) $(-1, \square)$ | e) $(\square, 5)$ | f) $(\square, 0)$ |

Write 5 ordered pairs for each relation.

13. $x + y = 5$

14. $x - y = 3$

15. $y = x + 4$

16. $y = 2x + 2$

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