



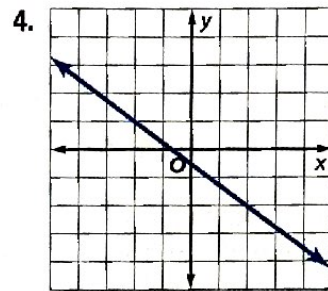
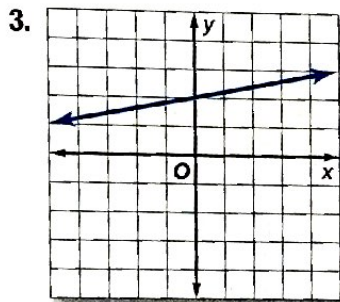
**Example 1** Find the inverse of each relation.

1.  $\{(4, -15), (-8, -18), (-2, -16.5), (3, -15.25)\}$

2.

<b>x</b>	-3	0	1	6
<b>y</b>	11.8	3.7	1	-12.5


**Example 2** Graph the inverse of each relation.



**Example 3** Find the inverse of each function.

5.  $f(x) = -2x + 7$

6.  $f(x) = \frac{2}{3}x + 6$

**Example 4** 7.  **REASONING** Dwayne and his brother purchase season tickets to the Cleveland Crusaders games. The ticket package requires a one-time purchase of a personal seat license costing \$1200 for two seats. A ticket to each game costs \$70. The cost  $C(x)$  in dollars for Dwayne for the first season is  $C(x) = 600 + 70x$ , where  $x$  is the number of games Dwayne attends.

- Find the inverse function.
- What do  $x$  and  $C^{-1}(x)$  represent in the context of the inverse function?
- How many games did Dwayne attend if his total cost for the season was \$950?

Practice and Problem Solving

Extra Practice is on page R4.

**Example 1** Find the inverse of each relation.

8.  $\{(-5, 13), (6, 10.8), (3, 11.4), (-10, 14)\}$

9.  $\{(-4, -49), (8, 35), (-1, -28), (4, 7)\}$

10.

<b>x</b>	<b>y</b>
-8	-36.4
-2	-15.4
1	-4.9
5	9.1
11	30.1

11.

<b>x</b>	<b>y</b>
-3	7.4
-1	4
1	0.6
3	-2.8
5	-6.2

**Example 2** Graph the inverse of each relation.

