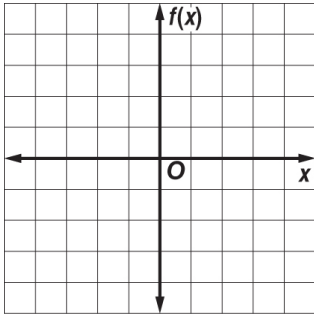


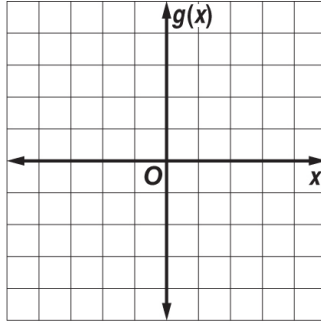
6-2 Day 2 Skills Practice
Inverse Functions and Relations

Find the inverse of each function. Then graph the function and its inverse. State the domain and range for the functions.

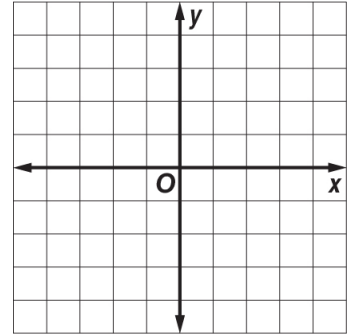
1. $f(x) = \frac{3}{4}x$



2. $g(x) = 3 + x$



3. $f(x) = x^2 - 2$



Determine whether each pair of functions are inverse functions using composition. Write *yes* or *no*.

4. $f(x) = x - 1$
 $g(x) = 1 - x$

5. $f(x) = 2x + 3$
 $g(x) = \frac{1}{2}(x - 3)$

6. $f(x) = 5x - 5$
 $g(x) = \frac{1}{5}x + 1$

7. $f(x) = -x^2 - 2$
 $g(x) = \sqrt{-x - 2}$

8. MEASUREMENT The points (63, 121), (71, 180), (67, 140), (65, 108), and (72, 165) give the weight in pounds as a function of height in inches for 5 students in a class. Give the points for these students that represent height as a function of weight.

9. REMODELING The Clearys are replacing the flooring in their 15-foot by 18-foot kitchen. The new flooring costs \$17.99 per square yard. The formula $f(x) = 9x$ converts square yards to square feet.

a. Find the inverse $f^{-1}(x)$. What is the significance of $f^{-1}(x)$ for the Clearys?

b. What will the new flooring cost the Clearys?