Name _____ Class _____ Date _____

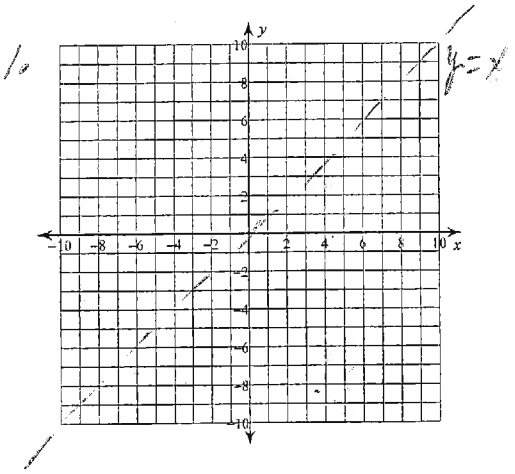
6-7 Practice

Form G

Find the inverse of each relation. Graph the given relation and its inverse.

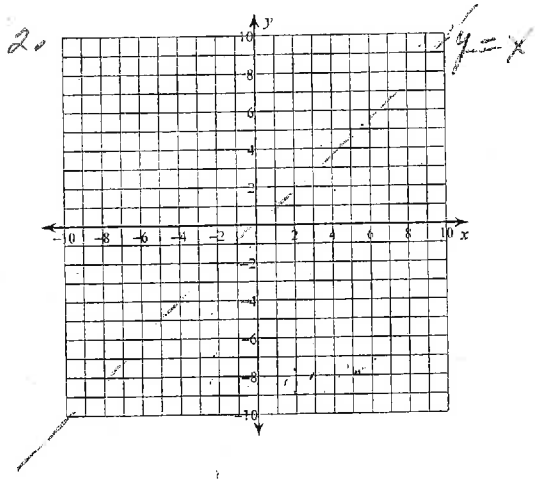
1.

x	−2	−1	0	1
y	−3	−2	−1	0



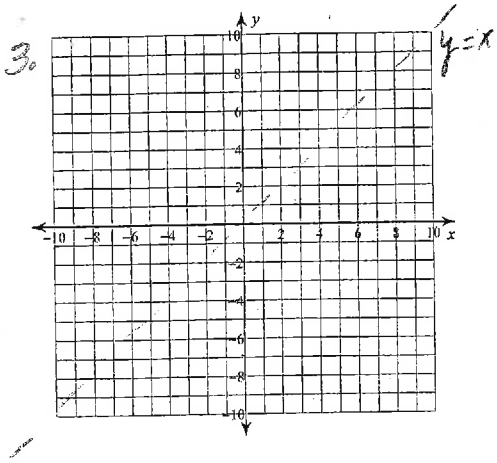
2.

x	0	1	2	3
y	−3	−1	0	−2



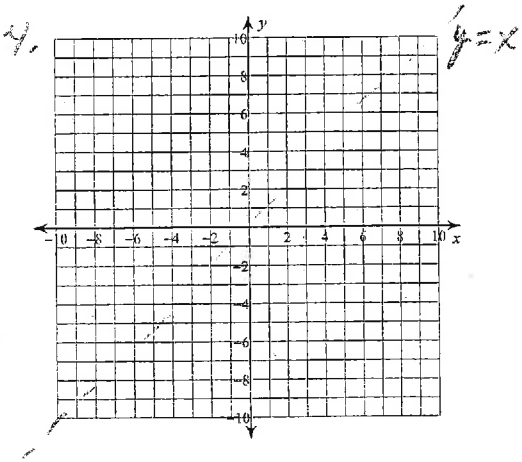
3.

x	−3	−1	1	2
y	−1	0	1	3



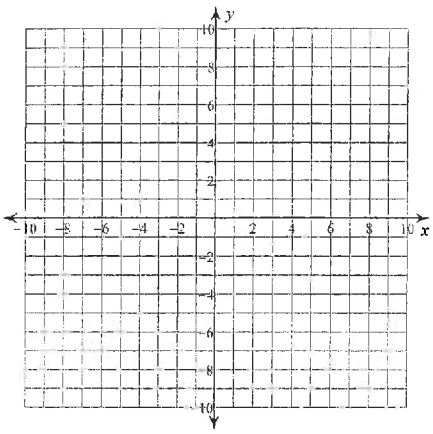
4.

x	−3	−2	−1	0
y	3	2	1	0

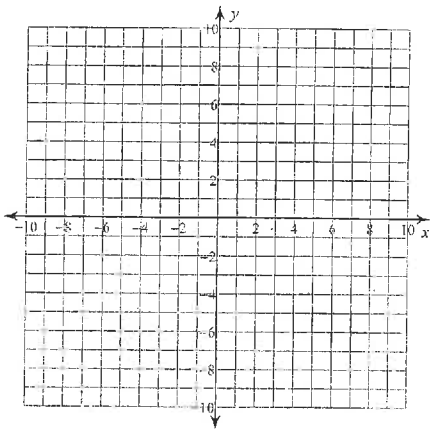


Graph each relation and its inverse. Hint: Use the graph of the function to sketch the inverse by interchanging coordinate values of at least 3-5 points.

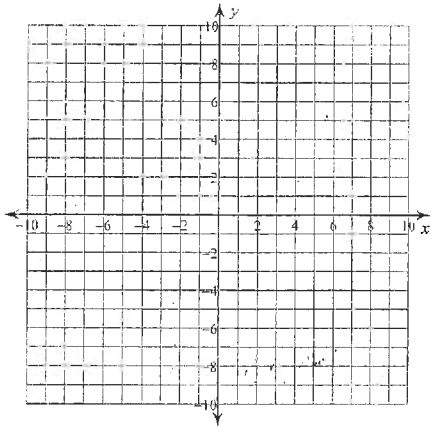
5. $y = \frac{x+3}{3}$



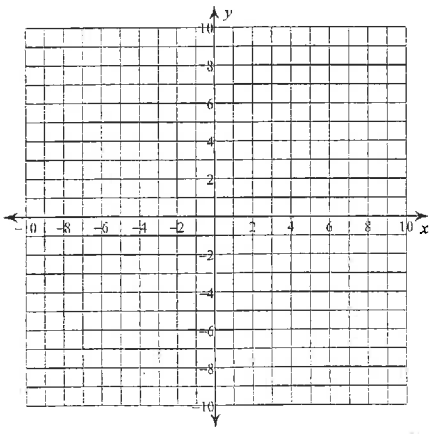
6. $y = \frac{1}{2}x + 5$



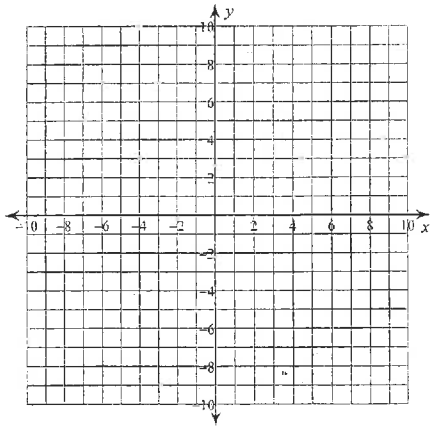
7. $y = 2x + 5$



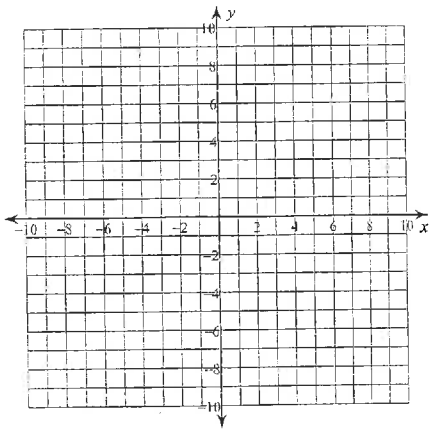
8. $y = \frac{1}{2}x^2$



9. $y = (x+2)^2$



10. $y = (x-1)^2 - 2$



For each function: #1. Find the inverse algebraically. # 2. State the domain and range of the function and its inverse. # 3. Determine whether the inverse is a function.

11. $f(x) = x^2 + 4$

12. $f(x) = \sqrt{x-1}$

13. $f(x) = \sqrt{3x}$

14. $f(x) = 3 - x$

15. $f(x) = (x+1)^2$

16. $f(x) = \frac{1}{\sqrt{x}}$