

INVERSE RELATIONS AND FUNCTIONS

In exercises 1 to 4, write the inverse relation for each function. In each case, decide whether the inverse relation is also a function.

1. $\{(2, 3), (3, 4), (4, 5)\}$

2. $\{(2, 3), (3, 4), (4, 3)\}$

3. $\{(1, 2), (2, 2), (3, 2)\}$

4. $\{(5, 9), (3, 7), (7, 5)\}$

In exercises 5 to 6, write the inverse relation for each function. In each case, decide whether the inverse relation is also a function. Then, graph the relation and its reverse.
USE GRAPH PAPER.

5. $\{(2, 4), (3, 9), (4, 16)\}$

6. $\{(-1, 2), (0, 3), (1, 2)\}$

In exercises 7 to 10, write an equation for the inverse of the relation defined by each equation.

7. $y = x^2 + 8$

8. $y = -2x - 4$

9. $y = \frac{x - 1}{2}$

10. $y = \frac{x + 1}{3}$