

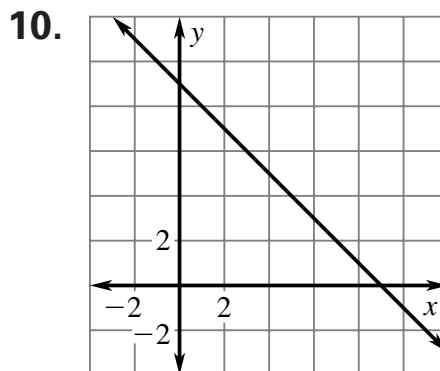
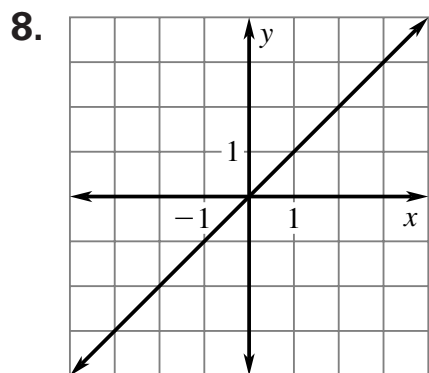
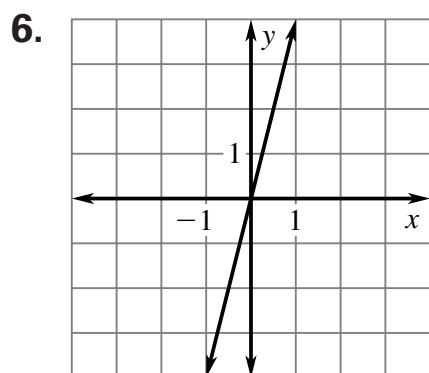
# ANSWERS FOR 2.1

For use with pages 71–74

## 2.1 Guided Practice

2. *Sample answer:* A relation is not a function if any input values map to more than a single output value. If this is the case, the vertical line at that input value will contain more than one point of a graph.

4. domain:  $-3, -2, -1, 1, 2, 3$   
range:  $-2, 0, 2$   
function



12. 18

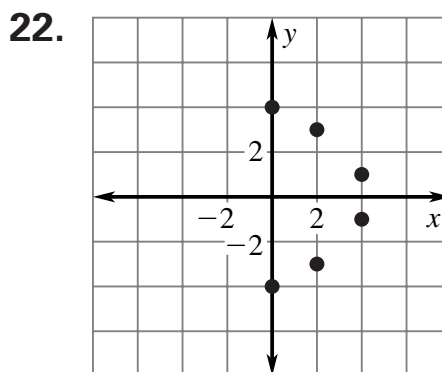
14. 13

16. 6

18. 7 h

## 2.1 Practice and Applications

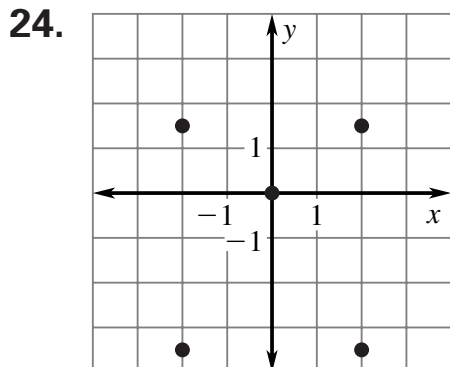
20. domain:  $-3, 1, 5$   
range:  $-2, -1, 3, 4$



no

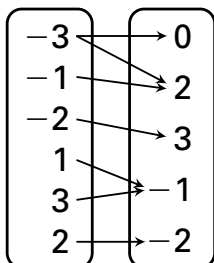
# ANSWERS FOR 2.1 (CONT.)

For use with pages 71–74



no

26. Input Output

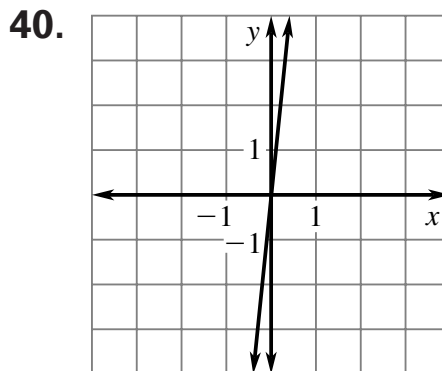
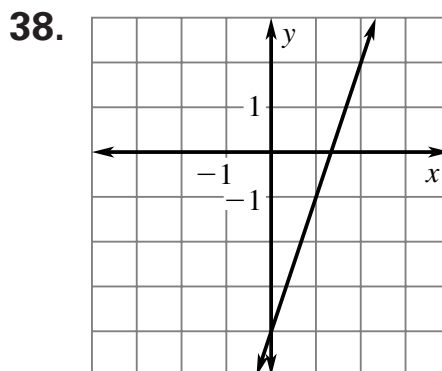
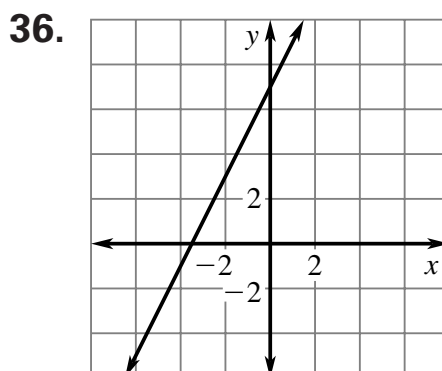
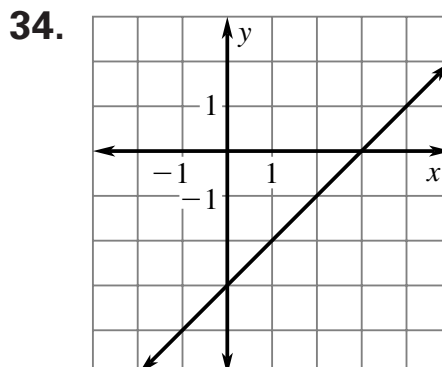


no

28. Yes; no; *Sample answer:* A function is always a relation, but a relation is not always a function. Any set of ordered pairs is a relation, but only those sets that do not map the same input value to more than one output value are functions.

30. no

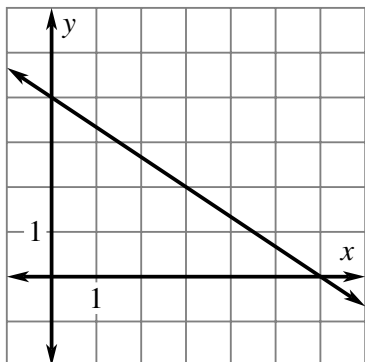
32. no



# ANSWERS FOR 2.1 (CONT.)

For use with pages 71–74

42.



44. linear; 2

46. not linear; 70

48. linear; -5

50.  $\frac{32\pi}{3}$ , or about 33.5; the volume of a sphere with radius 2 units.

52. Yes; *Sample answer:* Each Congress number corresponds to one number of Independents.

54. No; *Sample answer:* The input value 6 is mapped to 2 different output values, 3 and 4.

56.  $4\frac{1}{33}$  atmospheres  $\approx 59.2$  lb/in.<sup>2</sup>

58. 22 in.

60. B

62. C

## 2.1 Mixed Review

64.  $\frac{2}{3}$

66. -10

68. -1

70. 9

72.  $-\frac{7}{4}$

74. 159

76. no

78. yes

80. yes