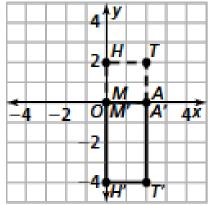
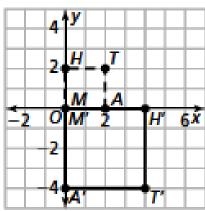
Lesson 3.02 Additional Practice

- The new point is below the original point.
- Add a positive value to the x-coordinate. Leave the y-coordinate the same.
- a. (-4, -6); the point is reflected across the x-axis.
 - b. (4, 6); the point is reflected across the y-axis.
 - c. (4, -6); the point is reflected across the origin, or rotated 180°.
- 4. a.



Answers may vary. Sample: The shape is reflected across the x-axis. It has the same horizontal length and twice the vertical height as the original.

b.

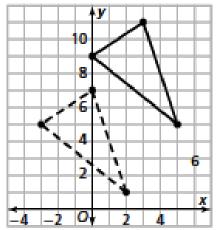


Answers may vary. Sample: The square is rotated 90° clockwise and the length of each side is doubled. 5. Yes; answers may vary. Samples:

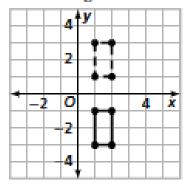
Any oblique line that contains the origin passes through exactly two quadrants. (y = 2x passes through Quadrants I and III; y = -x passes through Quadrants II and IV.)

Any vertical or horizontal line that does not contain the origin passes through exactly two quadrants. (y = 5 passes through Quadrants I and II; x = -3 passes through Quadrants II and III.)

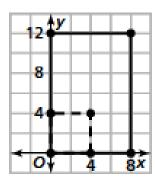
- Yes; the x-axis (y = 0) and the y-axis (x = 0) pass through no quadrants.
- The triangle shifts 3 units right and 4 units up.



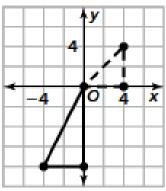
8. The rectangle moves 4 units down.



The square becomes a rectangle; the horizontal side is twice as long and the vertical side is three times as long.



10. The triangle is reflected across the x-axis and rotated 90° clockwise. Then the vertical height is doubled.



Lessons 3.03 and 3.04 **Additional Practice**

- 1. a. "Find the two numbers that are 5 units away from 11." The solutions are 16 and 6.
 - b. "Find the two numbers that are 12 units away from −3." The solutions are 9 and -15.
 - c. "Find the numbers that are less than 3 units away from 4." The solution is 1 < x < 7.
- 2. a. 10
- **b**. 13
- c. 17
- 3. Answers may vary. Sample:

a.
$$|x| = 17$$

b.
$$|x - 11| = 4$$

c.
$$|x-6|=0$$

c.
$$|x-6|=0$$
 d. $|x+8|=3$

e.
$$|x-3|=5$$

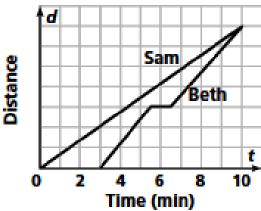
f.
$$|x| = -1$$

d.
$$\pm \frac{1}{20}$$

e. You can divide to solve the equation and write " ± " in front of the quotient.

- 5. Answers may vary. Sample:
 - a. Fred reads a constant number of pages per minute.
 - b. The wingspan of a bird increases at a constant rate as the length of the bird grows.
- a. B and C.
- b. C and D
- c. A and B.

7. a. Sam's and Beth's Exercise



b. Cathy's and Dave's Walk

