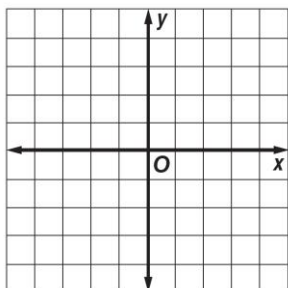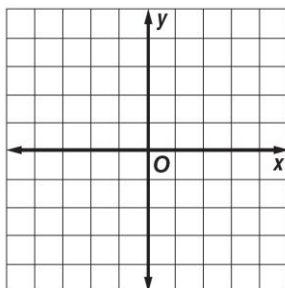# Lesson 4.4: Linear Functions

Directions: Graph each function.
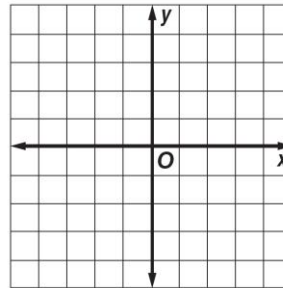
1. $y = 2x$
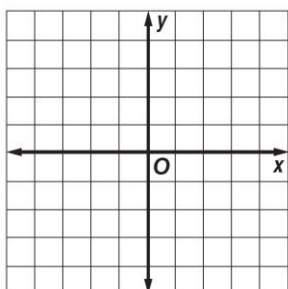

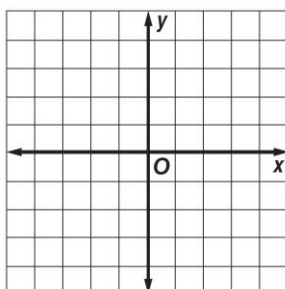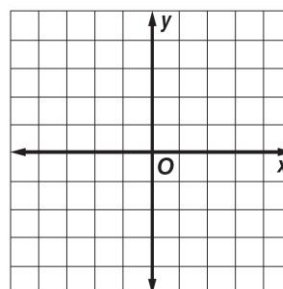**2.** $y = -4x$

3. $y = x - 4$
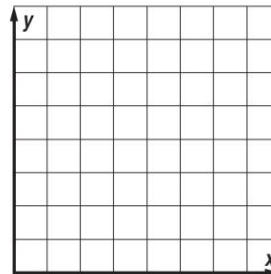

4. $y = x + 3$

5. $y = 3x + 1$

6. $y = \frac{1}{4}x + 2$

7. CARPENTRY Mrs. Valdez can assemble a chair in 1 day and a table in 4 days. Graph the function $y = 5 - \frac{1}{4}x$ to determine how many of each type of furniture Mrs. Valdez can assemble in 20 days. Is the function continuous or discrete? Explain.

8. FITNESS A fitness center has set a goal to have 500 members. The fitness center already has 150 members and adds an average of 25 members per month. The function $f(x) = 150 + 25x$ represents the membership after x months. Graph the function to determine the number of months it will take for the fitness center to reach its membership goal. Is the function continuous or discrete? Explain.