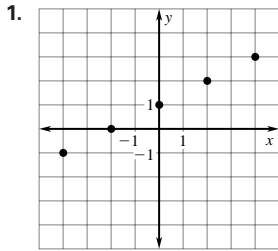
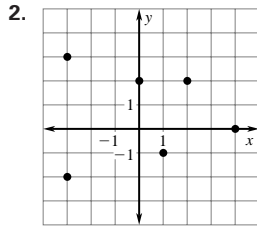


# Answer Key

## Chapter 2 Test (pages 10A–10B)



yes

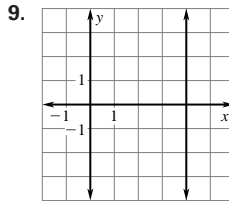
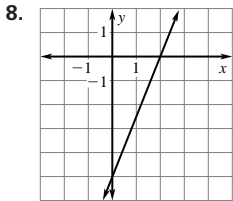
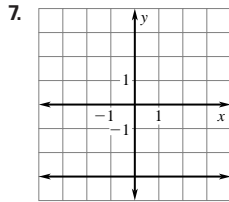
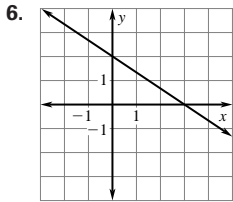


no

3.  $f(5) = 80 - 3(5) = 80 - 15 = 65$

4.  $f(-1) = (-1)^2 + 4(-1) - 7 = 1 - 4 - 7 = -10$

5.  $f(2) = 3|2 - 4| + 2 = 3(2) + 2 = 8$



10.  $y = \frac{3}{4}x - 5$

11.  $y + 4 = -1(x - 2)$   
 $y = -x - 2$

12.  $y - 8 = \frac{8 - 5}{-6 + 2}(x + 6)$   
 $y - 8 = -\frac{3}{4}x - \frac{9}{2}$   
 $y = -\frac{3}{4}x + \frac{7}{2}$

14.  $m_1 = -3$

$m_2 = \frac{1}{3}$

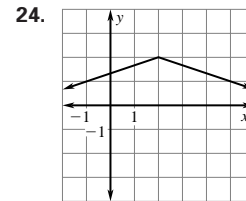
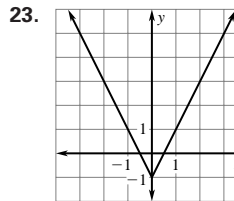
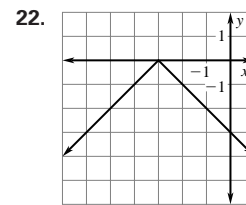
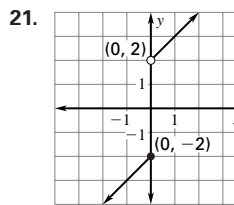
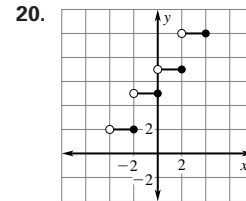
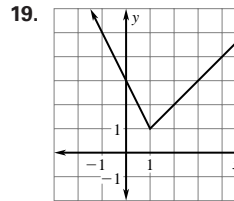
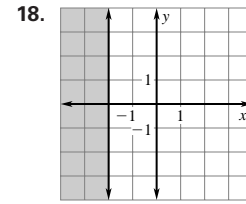
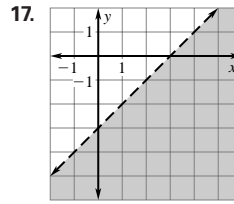
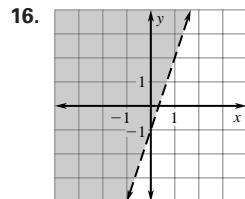
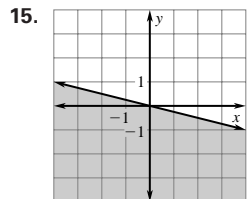
$y - 4 = \frac{1}{3}(x - 1)$

$y = \frac{1}{3}x + \frac{11}{3}$

13.  $m_1 = 1$

$y - 2 = x + 3$

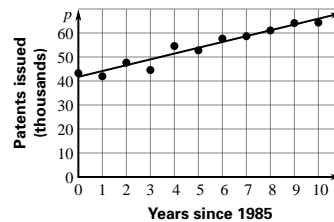
$y = x + 5$



25. about 0.00397 mi/sec<sup>2</sup>

26.  $m = \frac{1}{2}h$   
 $m = \frac{1}{2}(66)$   
 $m = 33$  in.

27. **U.S. Patents**



The scatter plot shows a positive correlation, which means as the number of years since 1985 increased, the number of patents issued tended to increase.

$p = 2.42t + 41.7$