

Section 4.1 Rectangular Coordinate System

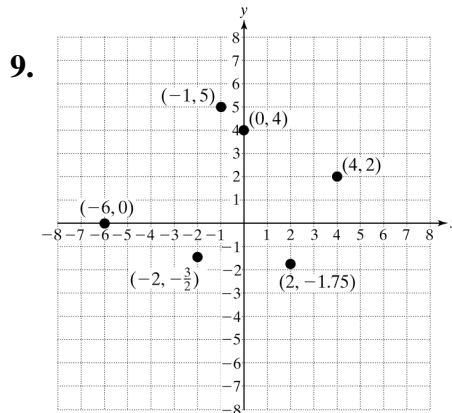
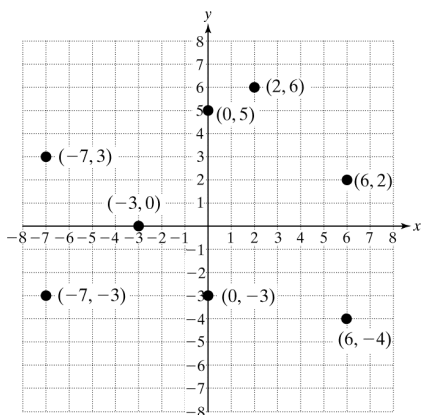
4.1 Practice Exercises

1. (a) x ; y -axis
- (b) ordered
- (c) origin; $(0,0)$
- (d) quadrants
- (e) negative
- (f) III

3. (a) Month 10
- (b) 30
- (c) Between months 3 and 5; also between months 10 and 12
- (d) Between months 8 and 9
- (e) Month 3
- (f) 80 patients

5. (a) On day 1 the price per share of the stock was \$89.25.
- (b) $\$93.00 - \$90.25 = \$1.75$
- (c) $\$90.25 - \$93.00 = -\$2.75$

7.



11. Quadrant IV

13. Quadrant II

15. Quadrant III

17. Quadrant I

19. $(0, -5)$ lies on the y -axis.

21. $\left(\frac{7}{8}, 0\right)$ is located on the x -axis.

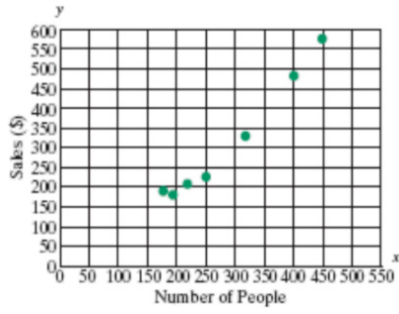
23. $A(-4, 2)$, $B\left(\frac{1}{2}, 4\right)$, $C(3, -4)$, $D(-3, -4)$, $E(0, -3)$, $F(5, 0)$

25. (a) $A(400, 200)$, $B(200, -150)$, $C(-300, -200)$, $D(-300, 250)$, $E(0, 450)$

(b) $250 \text{ m} - (-200 \text{ m}) = 450 \text{ m}$

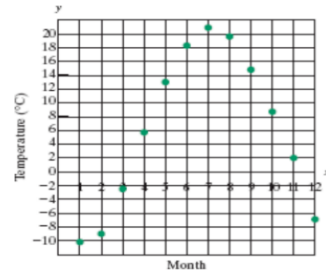
27. (a) $(250, 225)$, $(175, 193)$, $(315, 330)$, $(220, 209)$, $(450, 570)$, $(400, 480)$, $(190, 185)$; the first ordered pair represents 250 people in attendance produces \$225 in popcorn sales

(b)

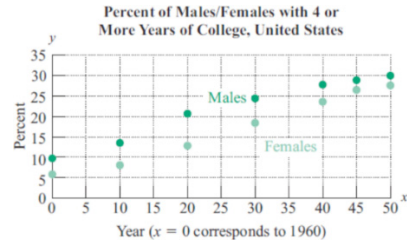


29. (a) $(1, -10.2)$, $(2, -9.0)$, $(3, -2.5)$, $(4, 5.7)$, $(5, 13.0)$, $(6, 18.3)$, $(7, 20.9)$, $(8, 19.6)$, $(9, 14.8)$, $(10, 8.7)$, $(11, 2.0)$, $(12, -6.9)$

(b)



31. (a)



(b) Increasing

(c) Increasing