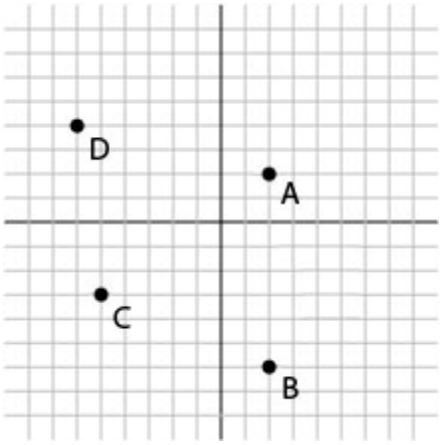
Section 4.5 – Chapter Summary

Problem Set 2

1. Give the coordinates of the points in the graph on the right.
2. List the coordinates that each of the points is in.



Graph the coordinates below. You can do this on graph paper or a piece of regular paper where you've drawn a pair of axes.

3. (3, 2)
4. (-2, 0)
5. (4, 6)
6. (-1, 2)
7. (3, -2)
8. (-3, 2)

Graph the following relations. Use whatever scale you think is appropriate.

14. { (1, -2), (1, 4), (-3, -3), (2, 8) }
15. { (1, -1), (-1, 7), (-2, 1), (1, 3) }
16. $f: x \to 3x^2 + 2x - 1$, $D = \{ -3, -1, 0, 4 \}$
17. $f: x \to 2x^3 + 2$, $D = \{ -4, 1, 6 \}$
18. Which of the relations in exercises 9-12 are functions?

Solve the following equations for *y*.

14. $4y + 3x = -2$
15. $\frac{-x+y}{2} = \frac{x+y}{3}$
16. $-3x + 2y = 2(x - 1) + x$
17. $\frac{2y}{3} = 3x + 1 + y$
18. $-6y + 5x = 2x + 2y - 5$
19. $-2x + 4 = 2y + 4$

Answer the following questions.

20. Two trains leave their terminal at the same time. The larger train crosses a bridge 2 hours after it takes off. The second train passes the same bridge 1 hour and 30 minutes after leaving. If one train was traveling 20mph faster than the other, what were their average speeds?
21. A cargo plane can make a round trip between two cities in five hours where it takes a passenger plane traveling at 60 mph less 6 hours to make the same trip. What speeds are the planes traveling and what is the distance between the cities?