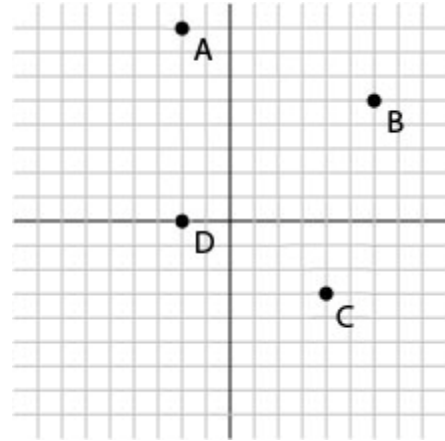


Section 4.5 – Chapter Summary

Problem Set 3

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

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

19. $\{(2, -3), (3, -1), (3, 0), (2, 6)\}$
20. $\{(1, 4), (-3, 2), (5, 0), (7, 7)\}$
21. $f: x \rightarrow 3x + x/3 + 1, D = \{-2, 0, 1, 6\}$
22. $f: x \rightarrow 2x^3 + x - 2/x, D = \{-6, 2, 8\}$
23. Which of the relations in exercises 9-12 are functions?

Solve the following equations for y.

14. $2y + 8x = -2$
15. $-6y - 4x = x + 4y + 1$
16. $-4x + 5y = 3(x + 1) + y$
17. $\frac{2y}{3} = \frac{y}{4} + \frac{2x}{3} - 3 + y$
18. $\frac{x + 2y}{3} = \frac{2x - y}{4}$
19. $-3x + 12 = 4y - 3x$

Answer the following questions.

22. Two cars leave Houston for Dallas at the same time. The difference between their speeds is 5 miles per hour. The first vehicle reaches a rest stop in 1.6 hours. If the faster car reaches the rest stop in 1.5 hours, what were their speeds?
23. A ship must average 20 knots to make a 10 hour run on schedule. If bad weather forces the ship to slow to 18 knots for the first three hours, how fast does the ship have to go to arrive on time? (A knot is one nautical mile per hour.)