Problem 1 – Intersecting Lines

1. What is the slope of each line on page 1.2?

2. What is the point of intersection of the two lines?

3. What is the slope of each line on page 1.3?

4. What is the point of intersection of the two lines?

5. Two lines with different slopes will intersect in one point.

  ☐ Always   ☐ Sometimes   ☐ Never

Problem 2 – Parallel Lines

6. What is the slope of each line on page 2.1?

7. Parallel lines intersect.

  ☐ Always   ☐ Sometimes   ☐ Never

8. Solve the equations on the left side on page 2.2 for y. What is the slope of each line?

9. The lines $x + 3y = 1$ and $x - 3y = 1$ are parallel.

  ☐ True   ☐ False

10. What kind of lines are $y = 4$ and $x = 4$?

11. What is another way to describe or name that pair of lines?

Problem 3 – Same two lines

12. Solve the equations on page 3.1 for *y*. What is the slope of each line?

13. How are the two lines related to each other?

14. Are the two lines on page 3.2 the same? How do you know?

15. The slope of both lines is –3.

    ☐ True   ☐ False

Homework – Word problems (Problems 4 and 5)

16. Write two equations that represent the problem given on page 4.1.

17. Enter three pairs of numbers that add up to 12 on page 4.2. What are your three pairs?

18. Using the graph on page 4.3, determine the solution to the problem.

19. Write two equations that represent the problem given on page 5.1.

20. Enter three pairs of ages on page 5.2. What are your three pairs?

21. Using the graph on page 5.3, determine the solution to the problem.