

Chapter 8 — Systems of Equations

Worksheet B: Independent Practice

Name: _____ Grade: _____ Date: _____

1. Solve $y = 2x + 4$ and $3x + y = 19$.

2. Solve $x + y = 15$ and $x - y = 1$.

3. Solve $4x + y = 23$ and $x - y = 2$.

4. Adult tickets cost \$15 and student tickets cost \$9. A total of 12 tickets are sold for \$156. Find each number.

5. Solve $y = -x + 12$ and $x + 2y = 15$.

6. Solve $3x + 2y = 20$ and $x + y = 8$.

7. Classify $y = 5x + 1$ and $y = 5x - 9$.

8. Solve $2x + y = 17$ and $2x - y = 7$.

9. Solve $2x + 3y = 19$ and $x - y = 2$.

10. A store sells binders for \$4 and folders for \$1. A customer buys 18 items for \$42. Find each number.

11. Solve $y = 4x - 5$ and $2x + y = 13$.

12. Solve $5x + y = 26$ and $2x - y = 9$.

13. Classify $3x - y = 6$ and $6x - 2y = 12$.

14. Solve $2x + y = 11$ and $3x - 2y = 6$.

15. Two numbers have a sum of 40 and a difference of 14. Find the numbers.

16. Solve $y = 2x + 3$ and $y = -3x + 18$.

17. Solve $x + 3y = 17$ and $2x - y = 6$.

18. Classify $2x + 4y = 10$ and $x + 2y = 7$.

19. Plan A costs \$18 plus \$7 per class. Plan B costs \$42 plus \$3 per class. When do the plans cost the same?

20. Choose substitution or elimination for $x = 2y + 1$ and $3x + y = 17$. Explain briefly, then solve.
