

Section 3.2 – Operations with Addition and Subtraction

Problem Set 1

Simplifying the following expressions.

1. $y - 3 = -8$

2. $x + 1 = 5$

3. $y + 5 = -12$

4. $6 + x = 2$

5. $-12 + a = -3$

6. $2x + 3 = 3x - 4$

7. $4y + 5 = 3y - 2$

8. $5x = 4x - 1$

9. $5y - 4 = 4y$

10. $3x + x = 3x - 8$

11. $8.1 + 2x = x - 7.8$

12. $-6.1x = -7.1x - 3$

13. $4a - \frac{3}{5} = 3a + \frac{1}{10}$

14. $3x + \frac{2}{3} = 2x + \frac{5}{3}$

15. $4y - 1 = 3y - \frac{2}{3}$

16. $8b = 9 + 7b$

17. $5a + 3a = 7a + 3$

18. $4x + .1 = .1 + 3x$

19. $6a + 3 = -1 + 5x + 4$

20. $4x + 4 = 5x + 1$

21. $4x - 8 = 3x + 5$

Write an algebraic equation for the following statements.

22. five more than a number is seventeen

23. four more than three times a number is half the number

24. three more than a number is equal to one less than half the number

25. three times the sum of a number and eight is twenty-one