

Section 3.4 – Putting It All Together

Problem Set 2

Solve the following equations.

1. $4x + 1 = 2x + 1$

2. $6x - 1 = 3x - 7$

3. $3y - 2 = 4y - 1$

4. $-2(x + 2) = 5x + 14$

5. $x - 3(3x + 1) = 4x - 1$

6. $-3(y + 1) - y = 3y - 2$

7. $2.2x + 1.6 = 4.1x + 1$

8. $5x - 3x + 2x = 6$

9. $5x + 2.8 = 3.2 + x$

10. $-2(b - 1) = -3(2b + 2) + b$

11. $2x - x = -5x + 1$

12. $3.1x + 2 = 1.4x - 4$

13. $\frac{4x}{5} + 1 = 8$

14. $x - \frac{5}{2} = \frac{1}{2}(3x - 2)$

15. $\frac{5}{4}x - \frac{1}{2} = x + 1$

16. $\frac{5}{4}x - \frac{1}{3} = 3x - 2$

17. $x + 5 = 4x - 4$

18. $-2c - 1 = -1 - 3c$

19. $2y - 1 = -3(y + 2) + y$

20. $3.1x - 1 = x$

21. $2x - 4 = -2(4x + 1) - 5x$

Write an algebraic equation for the following statements and solve it.

26. seven less than four times a number is six

27. three more than twice a number is four less than the number

28. seven more than twice a number plus three is the number

29. five more than a number is seven less than three times the number