

Section 3.4 – Putting It All Together

Problem Set 3

Solve the following equations.

1. $3x + 4 = 8x$

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

3. $3y - 3 = y - 4$

4. $-5(2x + 1) = x + 14$

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

6. $23x - 6 = x - 8$

7. $3.2x - 2.6 = 1.1x + 1.8$

8. $\frac{5}{3}x - \frac{1}{6} = x - 2$

9. $4x + 0.8 = 1.2 + 2.2x$

10. $5x - 2x = 6 + x$

11. $2x + 2x = 5x + 4$

12. $2.1x - 2.3 = 2.4x - 4$

13. $\frac{x}{3} + \frac{2}{3} = -1$

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

15. $2(b + 1) = 2(2b - 2) + 3b$

16. $2x - 3 = -3(2x - 1) - x$

17. $6x + 4 = 3x - 1$

18. $-2c - 9 = -8 - 7c$

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

20. $8.1x - 2.1 = x$

21. $\frac{3}{4}x - \frac{1}{4} = 3x - \frac{1}{3}$

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

30. four more than twice a number is twenty

31. three more than a number is twice the number

32. twice a number is three times the number plus three

33. five more than twice a number is four less than twice the number