

Solving Linear Equations Worksheet I

(Sections 3.1 – 3.4)

Simplify. Combine like terms.

1. $12y - 18y$

2. $-4(y + 5)$

3. $3x + 6y - 9x + 4$

4. $6(x - 9) + 10 - 3x$

5. Is 4 a solution of $5(2 - x) = -10$? Show work to justify your answer.

Solve and check the following equations. Show all steps.

6. $4x + 20 = 0$

7. $5x - 3 = 2x - 27$

8. $6x - 8 = 2x + 16$

9. $12 - 3x = 22 + 2x$

10. $x + 7x - 12 = -20$

11. $7x + 4 - 13x = -1 + 23$

12. $18 = 2x - 14$

13. $4y - 8y = 4 - 32$

14. $4y - 19 = -6y + 11$

15. $7x + 5 = 12x - 10$

16. $26 = 24 - x$

17. $2(6x - 7) = 10$

18. $19 - 3x = 14 + 2x$

19. $2(7 + 5y) - 3y = -35$

20. $14 + 4(x - 5) = 6 - 2x$

ANSWERS

1. $-6y$ 3. $-6x + 6y + 4$ 5. yes 7. $\{-8\}$ 9. $\{-2\}$ 11. $\{-3\}$ 13. $\{7\}$ 15. $\{3\}$ 17. $\{2\}$
19. $\{-7\}$