



Name: _____

Date: _____

Algebra 1 – Unit 2 – Solving Multi-Step Equations (Challenge)

Solve each two-step equation. Show your work.

$$1. \quad 4(3x + 7) = 100$$

$$2. \quad 2(4x - 8) = 48$$

$$3. \quad 5(4x - 20) = 0$$

$$4. \quad 3(2x - 12) - 19 = 35$$

$$5. \quad 2(4x + 17) = 130$$

$$6. \quad 4(4x + 12) + 26 = 170$$

$$7. \quad 3(4x + 6) + 11 = 89$$

$$8. \quad 4(5x - 18) = 28$$



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Algebra 1 – Unit 2 – Solving Multi-Step Equations (Challenge)

Solve each two-step equation. Show your work.

$$9. \quad 2(3x + 8) = 76$$

$$10. \quad 4(3x - 10) - 28 = 16$$

$$11. \quad 3(3x - 15) = 9$$

$$12. \quad 4(5x - 7) = 72$$

$$13. \quad 6x + 30 = 4x + 130$$

$$14. \quad 4(4x - 8) - 28 = 36$$

$$15. \quad 5(2x + 12) = 140$$

$$16. \quad 3(4x - 15) = 15$$



Algebra 1 – Unit 2 – Solving Multi-Step Equations (Challenge) – Answer Key

1. $4(3x + 7) = 100$

$x = 6$

2. $2(4x - 8) = 48$

$x = 8$

3. $5(4x - 20) = 0$

$x = 5$

4. $3(2x - 12) - 19 = 35$

$x = 15$

5. $2(4x + 17) = 130$

$x = 12$

6. $4(4x + 12) + 26 = 170$

$x = 6$

7. $3(4x + 6) + 11 = 89$

$x = 5$

8. $4(5x - 18) = 28$

$x = 5$



Algebra 1 – Unit 2 – Solving Multi-Step Equations (Challenge) – Answer Key

$$9. \quad 2(3x + 8) = 76$$

$$x = 10$$

$$10. \quad 4(3x - 10) - 28 = 16$$

$$x = 7$$

$$11. \quad 3(3x - 15) = 9$$

$$x = 6$$

$$12. \quad 4(5x - 7) = 72$$

$$x = 5$$

$$13. \quad 6x + 30 = 4x + 130$$

$$x = 50$$

$$14. \quad 4(4x - 8) - 28 = 36$$

$$x = 6$$

$$15. \quad 5(2x + 12) = 140$$

$$x = 8$$

$$16. \quad 3(4x - 15) = 15$$

$$x = 5$$