

Worksheet 4-12: Two Steps Equations**Step 1:** Isolate the ENTIRE variable term by **adding or subtracting****Step 2:** Isolate JUST the variable by **dividing or multiplying**

Steps	English
1. $2x + 5 = 25$ $2x + 5 - 5 = 25 - 5$ $2x = 20$ $\frac{2x}{2} = \frac{20}{2}$ $x = 10$	<p style="text-align: center;">"Two x plus 5 equals 25"</p> Step 1: Isolate $2x$ by subtracting 5 from both side Step 2: Isolate x by dividing both sides with 2.
2. $3y - 7 = 14$ $3y - 7 + 7 = 14 + 7$ $3y = 21$ $\frac{3y}{3} = \frac{21}{3}$ $y = 7$	<p style="text-align: center;">"Three y minus 7 equals 14"</p> Step 1: Isolate $3y$ by adding 7 to both sides. Step 2: Isolate y by dividing both sides with 3.
3. $\frac{m}{4} + 10 = 18$ $\frac{m}{4} + 10 - 10 = 18 - 10$ $\frac{m}{4} = 8$ $4\left(\frac{m}{4}\right) = 4(8)$ $m = 32$	<p style="text-align: center;">"m over 4 plus 10 equals 18"</p> Step 1: Isolate $\frac{m}{4}$ by subtracting 10 from both sides. Step 2: Isolate m by multiplying both sides with 4.
4. $\frac{n}{5} - 9 = -12$ $\frac{n}{5} - 9 + 9 = -12 + 9$ $\frac{n}{5} = -3$ $5\left(\frac{n}{5}\right) = 5(-3)$ $n = -15$	<p style="text-align: center;">"n over 5 minus 9 equals -12"</p> Step 1: Isolate $\frac{n}{5}$ by adding 9 to both sides. Step 2: Isolate n by multiplying both sides with 5.

Steps	English
5. $7x + 10 = 45$	" _____ Step 1: _____ Step 2: _____
6. $9y - 15 = 12$	" _____ Step 1: _____ Step 2: _____
7. $11a + 13 = -9$	" _____ Step 1: _____ Step 2: _____
8. $-2b + 13 = 9$	" _____ Step 1: _____ Step 2: _____
9. $-m - 10 = -18$	" _____ Step 1: _____ Step 2: _____

Answers: 5. $x = 5$; 6. $y = 3$; 7. $a = 2$; 8. $b = 2$; 9. $m = 8$

Steps	English
10. $\frac{c}{5} + 7 = -18$	" _____ Step 1: _____ Step 2: _____
11. $\frac{p}{3} - 1 = 10$	" _____ Step 1: _____ Step 2: _____
12. $\frac{w}{7} + 8 = -4$	" _____ Step 1: _____ Step 2: _____
13. $\frac{k}{-4} - 2 = -9$	" _____ Step 1: _____ Step 2: _____
14. $\frac{n}{-2} + 20 = 35$	" _____ Step 1: _____ Step 2: _____

Answers: 10. $c = -125$; 11. $p = 33$; 12. $w = -84$; 13. $k = 28$; 14. $n = -30$

Bingo: Two-Step Equations

Instructions:

- (1) Write numbers 1-9 randomly in the small boxes inside the big squares.
- (2) According to each question number, copy the question inside the big square.
- (3) Solve each question inside each big square. **Show your steps.**

1. $2x + 15 = 17$

2. $3n - 9 = 21$

3. $-w + 10 = 3$

4. $4k + 12 = -36$

5. $-7c + 30 = -19$

6. $\frac{a}{5} - 6 = 4$

7. $\frac{y}{11} - 5 = 2$

8. $\frac{m}{-3} + 9 = -1$

9. $\frac{b}{-9} - 8 = -20$

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