

Lesson 3.4 - Solving First-Degree Equations Involving Multiple Steps – Part 1

When the left side and right side of an equation are completely simplified, then the equation is ready to be solved. Using two operations is necessary to solve a multi-step equation. To solve the equation, we must make use of the order of operations (PEMDAS). However, when solving the equation we complete any addition/subtraction, first, then multiplication/division.

Class Notes – Solve each first-degree equation and check. If you do not solve an equation, explain why.

Set 1 $3x + 2 = 8$	$5x - 6 = 9$	$4m = 10 = 26$
Set 2 $5 + \frac{d}{2} = 37$	$\frac{p}{3} + 9 = -8$	$\frac{w^2}{11} + 10 = 15$

Set 3 $13 = 19 + 2n$	$6x^2 + 10 = 226$	$\frac{k}{-4} + 10 = -40$
Set 4 $3k - 11 = 10$	$\frac{n}{7} - 6 = 7$	$39 = 4d + 7$

Review – Solve each first-degree equation and check. If you do not solve an equation, explain.

R#1 $2x - 7 = 17$	$\frac{m}{5} + 15 = 19$	$5x + 7 = -38$
R#2 $6x - 4 = 20$	$4x - 3 = 13$	$\frac{d}{12} - 1 = 2$
R#3 $4x + 1 = 49$	$\frac{k}{7} - 3 = 4$	$3x - 9 = 12$