

3.8 Solving First-Degree Equations – More Practice

Class Notes – Classify each equation as a single-step first-degree equation, multi-step first-degree equation, or not a first-degree equation. Then solve each first-degree equation and check. If you do not solve an equation, explain why.

LP#1 $x + 10 = 6$	$3(m + 10) = -24$	$4w + 4 = 32$
LP#2 $-4y + 20 = 56 + 2y$	$1 + 7m^2 - m = 10$	$-6b = 72$
LP#3 $55 = \frac{d}{8}$	$15 - y = 32$	$10 = 2(m - 15)$

LP#4 $36 = 4n^2$	$-4(k + 11) = 48$	$20 = 5x + 10$
LP#5 $4g - 2(g - 2) = 12$	$5(3c - 2) - 24 = 16$	$22 = x - 18$

Review – Solve each first-degree equation as single-step or multi-step. Solve and check.

R#1 $10 + x = 8$	$5x = 20$	$4x - 7 = -31$
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R#2 $2x + 1 = 17$	$3 = -x + 3x + 7$	$4 + 6x - 7x = -6$
R#3 $x + 8 = -47 - 4x$	$-7x + 1 = -87 + 4x$	$-5(-9 - 7x) = 185$

Homework –

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

- 1)** $x + 3 = 15$ **2)** $-5x + 7 = 12$ **3)** $3x + 8 = 20$ **4)** $-9 + 6x + 5x = 24$
5) $-5 = -4x + 7x - 5$ **6)** $5x + 9 + x = -63$ **7)** $6 + 6x + x = 27$ **8)** $-6x + 7 = -84 + 7x$
9) $3x + 9 = 4x + 16$ **10)** $6x + 4 = 3 + 5x$ **11)** $7x + 8 = 18 - 3x$ **12)** $5x - 4 = 2x - 28$
13) $3(2x - 3) = 63$ **14)** $2(8 + 7x) = 72$ **15)** $3(5x - 10) = -150$ **16)** $-4(10 + 2x) = -136$
17) $-7x = -49$ **18)** $2 + 7x = 37$ **19)** $-1 + 2x = -23$ **20)** $-27 = -4x - 5x + 9$
21) $8 - 4x - x = 18$ **22)** $7x + 4 + 2x = 13$ **23)** $-4x + 7 + 5x = 12$ **24)** $6x + 9 = 9 + 5x$

Synthesis

TBA