Lesson 3.5 - Solving First-Degree Equations Involving Multiple Steps – Part 2

This lesson contains equations in which the distributive property is used first.

Reviewing the Distributive Property

State whether the following statements are true or false. If false, correct the statement.

LP#1 3(x + 4) = 3x + 12	6(y + 7) = 6y +7	4(n + 2) = 4n +8
LP#2 -3(x + 5) = -3x + 15	-6(w – 9) = -6w + 54	-5(m + 9) = -5m – 9
LP#3 (y – 3)(-4) = -4y +12	(a – 7)(6) = y – 42	(a + b)(5) = 5a + 5b
LP#4 -5(y+1) = -5 – 5	3(x + 4) = 3x + 12	-2(y + 5) = -2y – 10

Complete the rule below.

Let *a*, *b*, and *c* represent real numbers,

$$a(b+c)=$$

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

LP#5 $2(x+3)=-16$	$28=4(m+5)$	$120=15(w-2)$
LP#6 $8(y-1)=64$	$-4(p-9)=-48$	$14(4-d)=-168$
LP#7 $6=-3(x-1)$	$2(p-20)=8$	$4=4(b-2)$

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

R#1 $5(6x-7)=-35$	$4(1-5x)=-56$	$-4(1-6x)=164$
R#2 $5(x-1)=20$	$6(10+x)=132$	$-6(7x+10)=-144$
R#3 $-2(6x+9)=-150$	$3(3+6x)=225$	$-6(1+4x)=90$