

pg. 154-155; 9-14(a): 17-33 (b): 48

- |                                 |                           |            |
|---------------------------------|---------------------------|------------|
| 9) one solution, -1             | 19) add $8x$ to each side |            |
| 10) no solution                 | 21) 3                     | 31) 4      |
| 11) one solution, 7             | 23) 3                     |            |
| 12) no solution                 | 25) 2                     | 33) -2     |
| 13) identity                    | 27) $\frac{3}{7}$         |            |
| 14) one solution, 5             | 29) -8                    | 48) 5 sec. |
| 17) subtract $x$ from each side |                           |            |

### 3.5 More on Oct. 13, 2006 Linear Equations

ex 1  $4(1-x) + 3x = -2(x+1)$

A) 9  $4(1) - 4(x) + 3x = -2(x) + -2(1)$

B)  $\frac{6}{5}$   $4 - 4x + 3x = -2x - 2$

C) 6  $4 - 1x = -2x - 2$

D) -6  $4 + x = -2$

$$\begin{array}{r} 4 - 1x = -2x - 2 \\ +2x \quad +2x \\ \hline 4 + x = -2 \\ -4 \quad -4 \\ \hline x = -6 \end{array}$$

$$\begin{aligned}
 \text{ex 2)} \quad \frac{1}{4}(12x+16) &= 10-3(x-2) \\
 \frac{1}{4}(12x) + \frac{1}{4}(16) &= 10-3(x) + 3(2) \\
 3x+4 &= 10-3x+6 \\
 3x+4 &= 16-3x \\
 +3x & \quad +3x \\
 \hline
 6x+4 &= 16 \\
 -4 & \quad -4 \\
 \hline
 6x &= 12 \\
 6 & \quad 6 \\
 \hline
 x &= 2 \\
 \hline
 \hline
 \end{aligned}$$

A health club has two payment plans. You can become a member by paying a \$10 new member fee and use the gym for \$5 a visit. Or, you can use the gym as a nonmember for \$7 a visit. Compare the cost of the two payment plans.

# of visits	1	2	3	4	5	6	7
Non-Mem.	7	14	21	28	35	42	49
Mem.	15	20	25	30	35	40	45

Better to Be a Non-Member

Does Not matter Member

$$\text{NonMem} = \text{Mem.}$$

$$7V = 5V + 10$$

$$\begin{array}{r} 7V \\ -5V \\ \hline 2V = 10 \end{array}$$

$$\frac{2V}{2} = \frac{10}{2}$$

$$\underline{\underline{V = 5}}$$

O.T.L.

① Copy chart pg 15  $\rightarrow$   
Steps for solving Lin. Equ.  
into N.B.

② Pg 160-161 : 19-35(0); 40