Name: _____ Date: _____ Class: _____

Error Analysis – Solving Equations

Directions: Carlos solved the following equations but was having some trouble. In each of the following problems, Carlos made a mistake. See if you can help Carlos fix his mistakes. Examine the problem. When you find the mistake, circle it. Then, in the space provided, explain why it is a mistake, and solve the equation correctly.

Carlos' Work	Explain: What mistake did he make?	Corrected Solution
$3x + 2x - 6 = 24$ $-2x \quad -2x$ $x - 6 = 24$ $+6 \quad\quad +6$ $x = 30$		
$-2x + 4 = 12$ $-4 \quad -4$ $\underline{-2x} = \underline{8}$ $2 \quad\quad 2$ $x = 4$		
$4x - 3 = 17$ $+3 \quad\quad +3$ $4x = 20$ $-4 \quad\quad -4$ $x = 16$		
$3(2x - 4) = 8$ $6x - 1 = 8$ $+1 \quad\quad +1$ $\underline{6x} = \underline{9}$ $6 \quad\quad 6$ $x = 3/2$		

Reflect: Which of these mistakes have you made before? Why do you think you have made those mistakes? How can you avoid these common mistakes?