3-81. How many solutions does each equation below have? To answer this question, solve these equations, recording all of your steps as you go along. Check your solution, if possible.

a) \( 4x - 5 = x - 5 + 3x \)  
   \[ 4x - 5 \quad \text{Same expression on both sides} \]  
   \( 4x - 5 \)  
   \( x = \text{Infinitely Many Solutions} \)

b) \( -x + 4x - 7 = -2x + 5 \)  
   \[ -x + 4x - 7 + 2x \quad \text{Same expression on both sides} \]  
   \[ -3x + 7 \quad \text{Infinitely Many Solutions} \]  
   \[ x = \frac{7}{3} \]

c) \( 3 + 5x + 4 + 7x = 2x + 4x + 1 \)  
   \[ -1 + \left( \frac{2x}{2x} \right) \quad \text{Infinitely Many Solutions} \]

d) \( 4x - (-3x + 2) = 7x + 2 \)  
   \[ 4x + 3x - 2 \quad \text{Infinitely Many Solutions} \]

E) \( x + 3 + x + 3 = -(x + 4) + (3x - 2) \)  
   \[ 2x + 6 \quad \text{Infinitely Many Solutions} \]  
   \[ b \neq 2 \quad \text{NO SOLUTION} \]

f) \( x + 5 + (2x + x) = -3 \)  
   \[ 2x + 7 \quad \text{Infinitely Many Solutions} \]  
   \[ x = \frac{-7}{2} \]