**WMH # 3:** Solve the following equations. Some equations will have one solution, others will have no solutions, and others will have infinite solutions. **Include the value of x and the number of solutions for each problem.** 

1) 
$$2x + 2x + 2 = 4x + 2$$

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

3) 
$$-2(x+1) = -2x + 5$$

4) 
$$12 + 2x - x = 9x + 6$$

5) 
$$2(3x+3)=3(2x+2)$$

6) 
$$3x + 1 = 3(x-1) + 4$$

7) 
$$4x + 2x - 5 = 7x - 1$$

8) 
$$2(x+5) = 2x+5$$

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

10) 
$$6(x + 1) + 5 = 13 - 2 + 6x$$

## Hint: Steps

- 1) Distribute
- 2) Combine Like Terms
- 3) Worry about your X's

## Remember:

- One solution example x = 5
- No solution example 7 = 3
- Infinitely many solutions 8 = 8