## Variable on 2-Sides #1

Solve each equation.

1) 
$$-3 - 7r = -3r + 1$$

2) 
$$2a - 1 = -9 + 4a$$

3) 
$$-8 + 4n = -1 + 5n$$

4) 
$$x - 6 = 3x - 16$$

5) 
$$-5 + 4x = 7x - 8$$

6) 
$$2a + 3 = -3 - 2a + 2a$$

7) 
$$-14 - 2x = 6x - 6$$

8) 
$$5-7+8m+4m=m-2$$

9) 
$$-8x + 5x = 7x - 4x + 6$$

10) 
$$2n + 8n = n + 8n + 6$$

- 11) You are seeking to be emancipated from your parents. You are looking for an apartment. There are two final choices.

  Apartment A has a \$1000 security deposit and costs \$1200 each month. Apartment B has a \$1500 and costs \$1175 each month. How many months, m, will it take for the costs to be the same?
- Lenny makes \$55,000 and is getting annual raises of \$2,500. Karl makes \$62000, with annual raises of \$2,000. How many years, y, will it take for Lenny and Karl to make the same salary?