Factors and Products

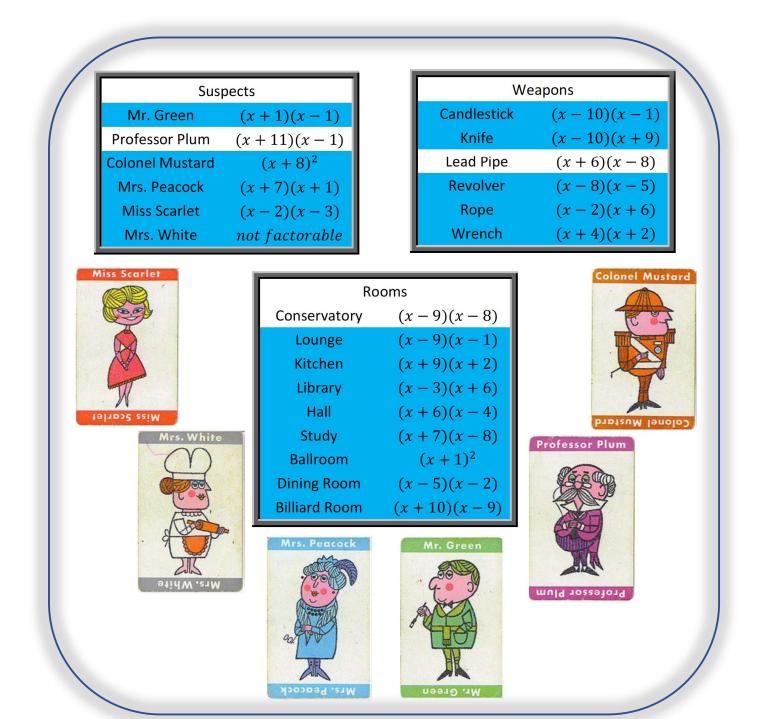
Name:

Date:

Learning Goal 1.2

Factor trinomials of the form $ax^2 + bx + c$.

Someone didn't factor right!! The horror!! Your job is to find out who did it, with what and where! Factor each problem and find the answer on the left. Eliminate that suspect, location or weapon to find out who the dastardly villain is that messed up their math assignment!



1.
$$x^2 + 8x + 7 = (x + 7)(x + 1)$$

2.
$$x^2 - 11x + 10 = (x - 10)(x - 1)$$

3.
$$x^2 + x - 90 = (x + 10)(x - 9)$$

4.
$$x^2 + 4x - 12 = (x + 6)(x - 2)$$

5.
$$x^2 - 10x + 9 = (x - 9)(x - 1)$$

6.
$$x^2 + 16x + 64 = (x + 8)^2$$

7.
$$x^2 + 2x - 24 = (x+6)(x-4)$$

8.
$$x^2 - 4x + 24$$
 not factorable

9.
$$x^2 - 13x + 40 = (x - 5)(x - 8)$$

10.
$$x^2 + 11x + 18 = (x + 9)(x + 2)$$

11.
$$x^2 - x - 56 = (x - 8)(x + 7)$$

12.
$$x^2 - 5x + 6 = (x - 2)(x - 3)$$

13.
$$x^2 - x - 90 = (x + 9)(x - 10)$$

14.
$$x^2 - 7x + 10 = (x - 5)(x - 2)$$

15.
$$x^2 + 3x - 18 = (x + 6)(x - 3)$$

16.
$$x^2 + 6x + 8 = (x + 4)(x + 2)$$

17.
$$x^2 + 2x + 1 = (x+1)^2$$

18.
$$x^2 - 1 = (x + 1)(x - 1)$$