Algebra 1 – Homework – Factoring Trinomials where a=1   Name_____

YOU MUST SHOW ALL YOUR WORK TO RECEIVE CREDIT!!

Factor each polynomial.

1. $x^2 + 8x + 7$ 1._____

2. $x^2 - 10x + 25$ 2._____

3. $x^2 + 7x - 60$ 3._____

4. $x^2 - 7x - 18$ 4._____

5. $x^2 - 16x + 48$ 5._____

6.   Explain how you would factor #5.

7.   In the answer column, list the correctly factored steps of $x^2 - 4x - 12$ by their letter.

A. 1, 12
    2, 6
    3, 4

B. $(x - 6)(x + 2)$

C. ____ · ____ $= -12x^2$
    ____ + ____ $= -4\,x$

D. $(x^2 - 6x)(+2x - 12)$

E. $2x \cdot -6x = -12x^2$
    $2x + -6x = -4x$

F. $x^2 - 6x + 2x - 12$

G. $x(x - 6) + 2(x - 6)$

Answer Column	
_____	_____
_____	
_____	
_____	
_____	
_____	