Name: \_\_\_\_\_

**Directions:** You *must* show all your work in the provided space. Simplify your answers whenever possible. Be certain to indicate your final answer clearly.

1. Factor each of the following trinomials. If you think that this is not possible state so. (a)  $x^2 - 64$ . (b)  $a^2 + 36$ 

(c) 
$$12x^2 - 27$$
 (d)  $x^2 + 4x - 21$ 

(e) 
$$x^2 + 4x + 3$$
 (f)  $x^2 - 9x + 18$ 

(g)  $x^2 + 3x + 6$  (h)  $3x^2 - 9x - 30$