

Name

# 8.6 Factor $ax^2+bx+c$

Alg I

I can factor trinomials of the form  $ax^2+bx+c$

## Example 1:

$$1) \quad 3t^2 + 8t + 4 \quad \begin{array}{r} 3t^2 \quad 4 \\ 3t \quad t \quad 2 \quad 2 \end{array}$$

$$\boxed{(3t+2)(t+2)}$$

Ch. 8 Quiz

$$2) \quad 4s^2 - 9s + 5 \quad \begin{array}{r} 4s^2 \quad 5 \\ 4s \quad s \quad 5 \quad 1 \end{array}$$

$$\boxed{(4s-5)(s-1)}$$

Ch. 7/8 Test

$$3) \quad 2h^2 + 13h - 7 \quad \begin{array}{r} 2h^2 \quad -7 \\ 2h \quad h \quad -7 \quad 1 \end{array}$$

$$\boxed{(2h-1)(h+7)}$$

Complete Skills Practice, pg. 538, #

## Example 2:

$$4) \quad -2y^2 - 5y - 3 \quad \begin{array}{r} 2y^2 \quad 3 \\ 2y \quad y \quad 3 \quad 1 \end{array}$$

$$\boxed{-(2y+3)(y+1)}$$

$$5) \quad -5m^2 + 6m - 1 \quad \begin{array}{r} 5m^2 \quad 1 \\ 5m \quad m \quad 1 \quad 1 \end{array}$$

$$\boxed{-(5m-1)(m-1)}$$

$$6) \quad -3x^2 - x + 2 \quad \begin{array}{r} 3x^2 \quad -2 \\ 3x \quad x \quad -2 \quad 1 \end{array}$$

$$\boxed{-(3x-2)(x+1)}$$