

Name

# Write Equations of

Alg I

## Parallel and Perpendicular Lines

I can write equations of parallel and perpendicular lines.

Example 3:

$$3) a: \begin{array}{r} 2y + x = -12 \\ -x \quad -x \end{array}$$

$$b: \begin{array}{r} 2y = 3x - 8 \\ 2 \quad 2 \quad 2 \end{array}$$

$$\frac{2y}{2} = \frac{-x}{2} - \frac{12}{2}$$

$$y = \frac{3}{2}x - 4$$

$$y = \frac{-1}{2}x - 6$$

These lines are not perpendicular, because the slopes are not negative reciprocals.

Example 4:

$$4) (4, 3) \quad y = 4x - 7$$

$$m = -\frac{1}{4}$$

$$y = mx + b$$

$$3 = -\frac{1}{4}(4) + b$$

$$3 = -1 + b$$

$$\begin{array}{r} +1 \quad +1 \\ \hline b = 4 \end{array}$$

$$y = -\frac{1}{4}x + 4$$

Ch. 4

Quiz

Ch. 3/4

Test

\* Complete Skills Practice, pg. 261, #3, 18