Algebra 1   Name_____ ID: 2

5.3 Practice B pg2 (point-slope to slope-intercept eq)   Date_____ Period____

MORE PRACTICE: Write the slope-intercept form of the equation of the line through the given points.

1) through: $(-2, -4)$ and $(-3, 4)$

$$m = \frac{4+4}{-3+2} = \frac{8}{-1} \quad \boxed{m = -8}$$

P/S $y + 4 = -8(x+2)$

$$y + 4 = -8x - 16$$
$$\underline{-4 \qquad\qquad -4}$$

S/I $\boxed{y = -8x - 20}$

2) through: $(-2, -7)$ and $(4, 2)$

$$M = \frac{2+7}{4+2} = \frac{9}{6}$$
$$\boxed{m = 3/2} \quad \text{) reduce}$$

P/S $y + 7 = \frac{3}{2}(x+2)$

$$y + 7 = \frac{3}{2}x + 3$$
$$\underline{-7 \qquad\qquad -7}$$

S/I $\boxed{y = \frac{3}{2}x - 4}$

3) through: $(0, -2)$ and $(3, 2)$

$$m = \frac{2+2}{3-0} = \frac{4}{3}$$
$$\boxed{M = 4/3}$$

$$\boxed{B = -2}$$

S/I $\boxed{y = \frac{4}{3}x - 2}$

4) through: $(0, -3)$ and $(-5, 4)$

$$M = \frac{4+3}{-5-0} = \frac{7}{-5}$$
$$\boxed{m = 7/-5}$$

$$\boxed{B = -3}$$

S/I $\boxed{y = -\frac{7}{5}x - 3}$