Classwork 1

College Algebra and Trigonometry, MTH 123, Section 3260, Fall 2011

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Name: SOLUTION

1. Find the slope of the line passing through points $(3, -1)$ and $(-2, 5)$.

$$m = \frac{5-(-1)}{-2-3} = \boxed{\frac{-6}{5}}$$

2. Find the equation of the line passing through the point $(2, -3)$ and parallel to the line $6x - 3y + 7 = 0$

$3y = 6x + 7$ slope $= 2$

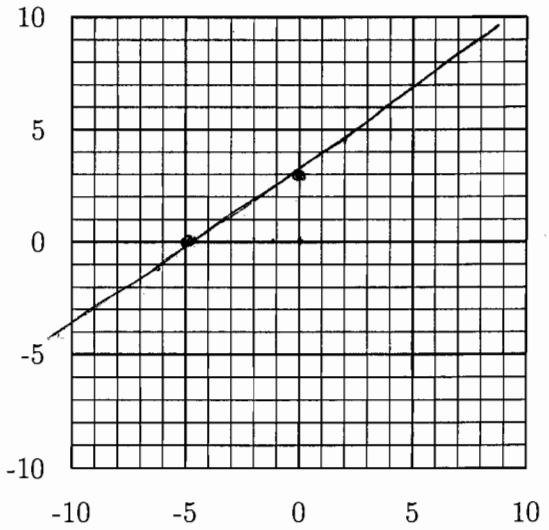
$y = 2x + 7/3$ point $= (2, -3)$

Eqn $y - (-3) = 2(x - 2)$

$y + 3 = 2x - 4$

$\boxed{y = 2x - 7}$

3. Find the x and y intercepts of the line $3x - 5y + 15 = 0$ and sketch the line.



y-intercept:

$x = 0$ $-5y + 15 = 0$

$-5y = -15$

$\boxed{y = 3}$

point $= (0, 3)$

x-intercept:

$y = 0$ $3x + 15 = 0$

$3x = -15$

$\boxed{x = -5}$

point $= (-5, 0)$