Algebra II   Worksheet #3   Unit 2   selected solutions

Find the equation of each line described below. If the line is oblique, write the slope-intercept equation. Graph both equations (the given equation as well as your solution).

1. Through (-2 , 3) parallel to -3x + 2y = 4

$m_2 = \frac{3}{2}$
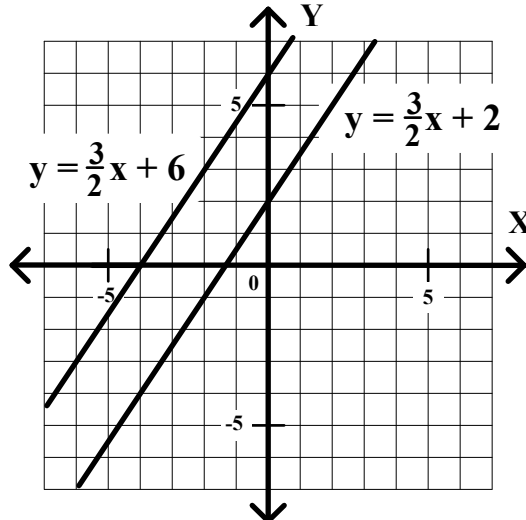
$2y = 3x + 4$

$y = \frac{3}{2}x + 2$

$m_1 = \frac{3}{2}$

first

$y - 3 = \frac{3}{2}(x + 2)$

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

$\boxed{y = \frac{3}{2}x + 6}$

$y = \frac{3}{2}x + 6$

$y = \frac{3}{2}x + 2$

10. Through (3 , -2) perpendicular to 2x – 5y = 10

$m_2 = \frac{-5}{2}$

$-5y = -2x + 10$

$y = \frac{2}{5}x - 2$

$m_1 = \frac{2}{5}$

first

$y + 2 = \frac{-5}{2}(x - 3)$

$y + 2 = \frac{-5}{2}x + \frac{15}{2}$

$\boxed{y = \frac{-5}{2}x + \frac{11}{2}}$

$y = \frac{-5}{2}x + \frac{11}{2}$

$y = \frac{2}{5}x - 2$