

⑨ Standard Form ( $Ax + By = C$ )

$A, B, \text{ \& } C$  are integers

$$m = -\frac{3}{2}, \quad \begin{matrix} x_1 & y_1 \\ (1, & -4) \end{matrix}$$

point-slope formula

$$y - y_1 = m(x - x_1)$$

$$y - -4 = -\frac{3}{2}(x - 1)$$

$$\begin{array}{r} y + 4 = -\frac{3}{2}x + \frac{3}{2} \\ \underline{-4} \qquad \qquad \underline{-4} \end{array}$$

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

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

$$2y = -3x - 5$$

$$\boxed{3x + 2y = -5}$$