

Find an equation of the line. Write the equation in standard form.

4. Slope $-\frac{6}{7}$; through $(4, 2)$

A) Point-Slope Form. $y - y_1 = m(x - x_1)$

$$m = -\frac{6}{7} \quad (4, 2)$$

$x_1 \quad y_1$

B) Standard Form: $Ax + By = C$

$$y - 2 = -\frac{6}{7}(x - 4)$$

$$7 \cdot y - 2 \cdot 7 = \frac{-6}{7} x \cdot 7 + \frac{24}{7} \cdot 7$$

$$\begin{array}{r} 7y - 14 = -6x + 24 \\ +6x \quad +14 \quad +6x \quad +14 \\ \hline \end{array}$$

$$6x + 7y = 38$$