

(p26)

Standard form Eqn of Line

$$\begin{aligned} 3x + 17y &= 61 \\ ax + by &= c \end{aligned}$$

a, b, c constants
a, b not both zero.

Like a, b, c
to be
integers.

Get Eqn of line through points $(-8, 5), (9, 2)$.

Answer in Standard form.

SOLN

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

$$m = \frac{2 - 5}{9 - (-8)} = \frac{-3}{17}$$

$$y - 5 = \frac{-3}{17}(x + 8)$$

$$17y - 85 = -3(x + 8)$$

$$17y - 85 = -3x - 24$$

$$3x + 17y = 61$$