

Key

$$10/10 = 100$$

Support for College Algebra
Fall 2016
11:00am MWF
Quiz #2

SHOW ALL WORK ON QUIZ!

1. Write the following equation in *Standard form*: $y + 5 = \frac{3}{5}(x - 2)$

$$\textcircled{1} \quad y + 5 = \frac{3}{5}(x - 2)$$

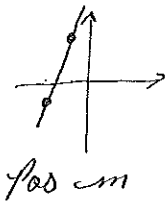
$$5(y + 5 = \frac{3}{5}x - \frac{6}{5})$$

$$\textcircled{2} \quad 5y + 25 = 3x - 6$$

$$-1(-3x + 5y = -31)$$

$$\textcircled{3} \quad \boxed{3x - 5y = 31}$$

2. Write the equation of a line in *Standard form* given the points $(-2, 8)$ and $(-5, -3)$.



$$\textcircled{1} \quad m = \frac{(-3) - (8)}{(-5) - (-2)} = \frac{-11}{-3} = \frac{11}{3}$$

$$\textcircled{2} \quad y - y_1 = m(x - x_1)$$

$$y - (8) = \frac{11}{3}(x - (-2))$$

$$y - 8 = \frac{11}{3}(x + 2)$$

$$3(y - 8) = \frac{11}{3}x + \frac{22}{3}$$

$$3y - 24 = 11x + 22$$

$$-1(-11x + 3y = 46)$$

$$\boxed{11x - 3y = -46}$$

$$\textcircled{3} \quad CA (-5, -3)$$

$$11(-5) - 3(-3) = -46$$

$$-55 + 9 = -46$$

$$-46 = -46 \checkmark$$