Quiz 1.2 – Linear Functions

1. (1 pt) Write an equation for the line through the point (4, 4) with slope 7 in point-slope form $y - y_0 = m(x - x_0)$.

$y - ____ = ____$

2. (1 pt) Suppose the points (5, 10) and (8, 3) lie on the graph of a function $f$.

(a) Write an equation for the secant line through the points (5, 10) and (8, 3) in point-slope form $y = y_0 + m(x - x_0)$.

$y = ____ + _____$

(b) The slope of the secant line between (5, 10) and (8, 3) is _______.

(c) The average rate of change of $f$ between (5, 10) and (8, 3) is _______.

3. (1 pt) Write the equation for the line $y - 5 = -3(x - 7)$ in the form $y = mx + b$, and enter your answer in this form.

$y = ____$

The slope is _______.

The $y$-intercept is _______.

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