Forms of Linear Equations Quiz

1. Determine this equation: $y = 2x + 3$ in standard form.

a) $2x + y = 3$

b) $2x - y = -3$

c) $3x + 2y = 1$

d) $(y - 2) = 2(x + 1)$

2. Rewrite this equation: $y = \frac{1}{2}x - 5$ into standard form

a) $x - 2y = 10$

b) $2x + 4y = 10$

c) $x + 2y = 5$

d) $-\frac{1}{2}x + y = -5$

3. Identify the slope and y-intercept in the equation: $5x + 4y = 8$

a) slope: -5 and y-intercept: 8

b) slope: $-\frac{5}{4}$ and y-intercept: 2

c) slope: $-\frac{5}{4}$ and y-intercept: 8

d) slope: $\frac{4}{5}$ and y-intercept: 2

4. Rewrite the equation in standard form: $(y - 3) = 2(x - 4)$

a) $2x + y = 11$

b) $2x - y = 5$

c) $3x + 2y = 8$

d) $2x - y = 11$

5. Write the equation in standard form for the line passing through $(-6, -2)$ and $(7, 11)$

a) $x - y = -4$

b) $2x + 4y = 1$

c) $-x + y = 5$

d) $4x + 2y = 3$

6. Find the slope and y-intercept value in $7x - 2y = -16$

a) slope: $\frac{2}{7}$ and y-intercept: 8

b) slope: 14 and y-intercept: 2

c) slope: -7 and y-intercept: -16

d) slope: $\frac{7}{2}$ and y-intercept: 8

7. What is the equation in standard form when slope is $\frac{2}{3}$ and y-intercept is $\frac{1}{2}$?

a) $4x - 6y = -3$

b) $y = \frac{2}{3}x + \frac{1}{2}$

c) $2x - 3y = 1$

d) $6x + 3y = 9$

8. Write the equation in standard form: $y = \frac{7}{6}x + \frac{1}{8}$

a) $6x - 8y = -3$

b) $42x + 15y = -7$

c) $28x - 24y = -3$

d) none of the above

9. Determine the equation of the line passing through x-intercept = -4 and y-intercept = 8

a) $2x - y = -8$

b) $4x + y = 4$

c) $4x - 8y = 0$

d) none of the above

10.   Convert the point-slope equation: $\left(y - \frac{1}{2}\right) = \frac{2}{3}\left(x - \frac{9}{8}\right)$ into standard form equation.

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

b) $3y = 2x - 3$

c) $8x - 12y = 3$

d) $2x - 3y = 3$