

CUNY Problem set #2 (To be used before Exam #2)

Math 020,College of Staten Island

Show all the work and circle the correct answer:

- 1) Find the equation of horizontal line passing through the point: (7,-4)
a) $y = x - 4$ b) $y = -\frac{4}{7}x$ c) $x = 7$ d) $y = -4$

- 2) Find the slope and y-intercept of the line: $3x - 6y = 48$
a) Slope = $\frac{1}{2}$ and y-intercept: (0, -8)
b) Slope = $-1/2$ and y-intercept: (0, 8)
c) Slope = -3 and y-intercept: (0, 48)
d) Slope = 3 and y-intercept: (0, 8)

- 3) Find the equation of a vertical line passing through: (-2,5)
a) $x = -2$ b) $y = x + 5$ c) $y = -\frac{5}{2}x$ d) $y = 5$

- 4) Find the slope and y-intercept of the line: $7y - 4x = 21$.
a) Slope = $-4/7$ and y-intercept: (0,3)
b) Slope = $4/7$ and y-intercept: (0,21)
c) Slope = $7/4$ and y-intercept: (0,-3)
d) Slope = $4/7$ and y-intercept: (0,3)

- 5) Find the equation of a line that passes through the point (-3,4) and has a slope of $\frac{-2}{3}$.
a) $y = -2/3 x + 6$ b) $y = -2/3 x + 2$ c) $y = -2/3 x + 4$ d) $y = -2/3 x - 6$

- 6) Find the equation of a line that passes through the points: (-2, 3) and (1,-9).
a) $Y = -2x - 1$ b) $y = 6x + 12$ c) $y = -4x + 3$ d) $y = -4x - 5$

- 7) Find the equation of a line that passes through the points (-5,-6) and (-7,4)
a) $y = \frac{1}{6}x - \frac{31}{6}$ b) $y = \frac{1}{5}x + \frac{13}{5}$ c) $y = -5x + 39$ d) $y = -5x - 31$

- 8) Solve the system below by Graphing:
$$\begin{cases} -2x + y = 4 \\ 4x + 2y = 8 \end{cases}$$

- 9) What is the value of the x-coordinate of the solution to the following system:

$$\begin{cases} 3x + y = 3 \\ -2x + 2y = -10 \end{cases}$$

- a) $x = -3$ b) $x = 2$ c) $x = -7$ d) $x = -2$

- 10) If it takes $\frac{3}{4}$ cup of vegetable oil to make 6 cupcakes, how many cupcakes can be made with 2 cups of vegetable oil?

- a) 9 cupcakes b) 4 cupcakes c) 16 cupcakes d) 12 cupcakes

- 11) If a car travels 350 miles in 5 hours, at the same speed how long will it take to travel 560 miles?

- a) 4 hours b) 6 hours c) 8 hours d) 10 hours