MAT 150.5 Elementary Algebra Midterm Practice Form A

http://www.helpyourmath.com/150.5/

1.) Find the slope and y-intercept for the graph of the equation.

$$-5x - 8y = -24$$

(a) Slope = -5 and y-intercept = $(0,-24)$

(b) Slope = $-\frac{5}{8}$ and y-intercept = $(0, -3)$

(c) Slope = $\frac{5}{8}$ and y-intercept = $(0, -3)$

(d) Slope = $-\frac{5}{8}$ and y-intercept = $(0, 3)$

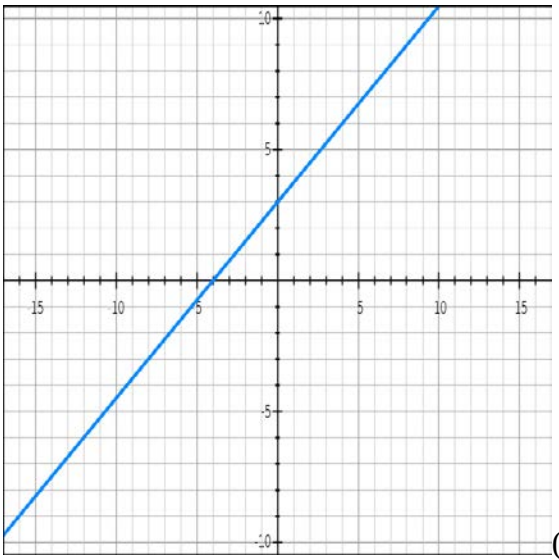
2.) What is the equation of the line passing through (5, -6) and (4, 1)?

(a) $y = 7x + 29$ (b) $y = -5x + 21$ (c) $y = -7x + 29$ (d) $y = 7x - 29$

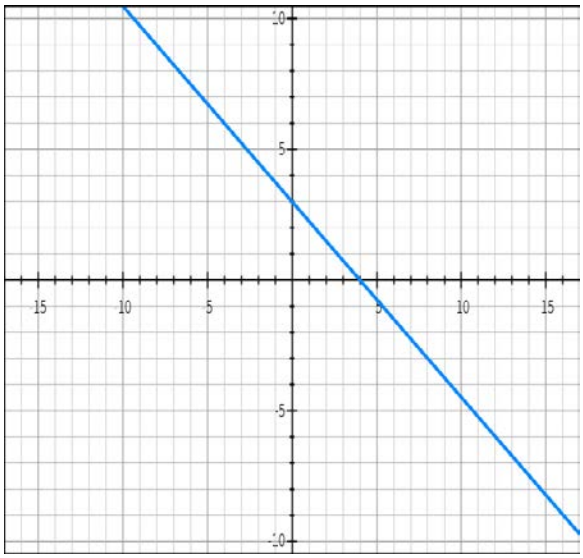
(e) $y = 5x - 19$

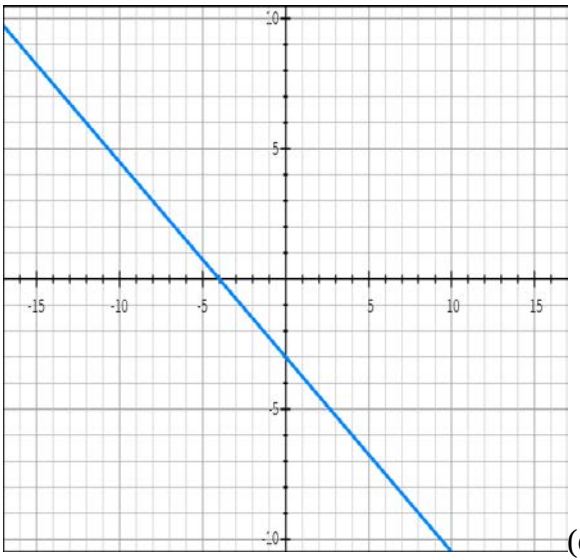
3.) Which of the following if the graph of the given equation? $3x - 4y = -12$

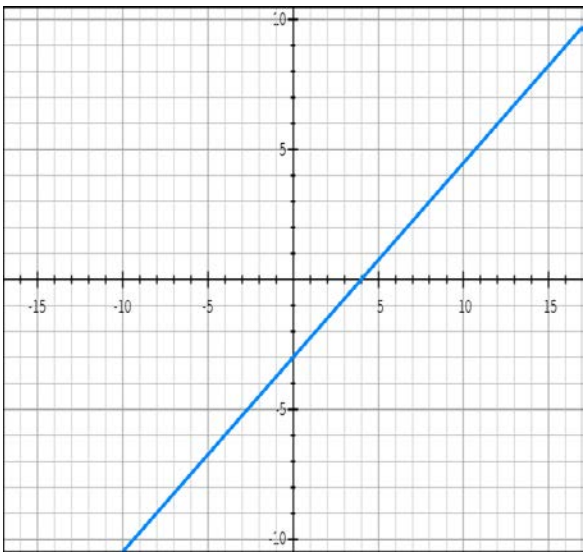
(a)



(b)



(c) 

(d) 

4.) Simplify. $\frac{(n^{-6})^4}{n^5 n^{-3}}$

(a) $\frac{1}{n^{14}}$ (b) n^3 (c) $\frac{1}{n}$ (d) $\frac{1}{n^{26}}$ (e) n^2

5.) Michael walks 15 miles in $3\frac{3}{4}$ hours. How far will he walk in 2 hours?

(a) 6 miles (b) 8 miles (c) 9 miles (d) 10 miles (e) 12 miles

6a.) From the year 2000 through 2017, the rate of Asian international students at BMCC, has shown a linear increase. In 2006, the population of Asian international students at BMCC was approximately 9.5%, and had risen to approximately 13% in the year 2017. In the linear model, t = time in years after 2006, and p = the rate of the Asian international student population at BMCC as a percentage. Which of the following equations represent the linear model of this increase? (Data is made up)

(a) $P = 3.14t + 9.5$ (b) $P = 3.14t + 13$ (c) $P = 0.32t + 9.5$ (d) $P = 0.32t + 13$

6b.) Use this model to predict the 2020 Asian international students rate.

(a) 17.48% (b) 13.98% (c) 56.96% (d) 53.46%

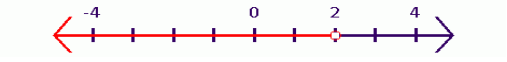
7.) Solve for z. $Ut = -3x + 5zP$

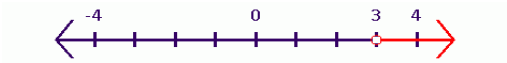
(a) z= $\frac{Ut+3x}{5P}$ (b) $z = \frac{Ut-3x}{5P}$ (c) $z = -\frac{Ut-3x}{5P}$ (d) $z = -\frac{Ut+3x}{5P}$

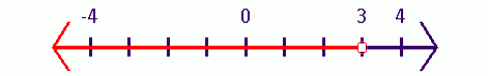
8.) The number of employees in the company is 800 now but there were 1200 in 2010. What is the percentage decreases.

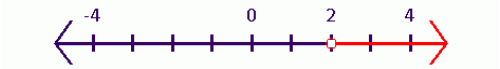
(a) 33% (b) 50% (c) 11% (d) 10% (e) 40%

9.) Find the graph of the solution of the inequality. $11x - 1 < -3(x - 9)$

(a) 

(b) 

(c) 

(d) 

10.) Solve for t: $-2(t + 6) + 8(3t - 1) = -(2 - t)$

(a) $-\frac{6}{7}$ (b) $-\frac{13}{9}$ (c) $\frac{7}{6}$ (d) $\frac{6}{7}$ (e) $\frac{13}{9}$

Answer:

1. D	2. C	3. A	4. D	5. B	
6(a). C	6(b). B	7. A	8. A	9. A	10. D