

PROBLEMS A to G are similar to CEAFE problems:

A. What is the value of the y coordinate of the solution to the system of equations.:

$$\begin{aligned}x + 3y &= 2 \\ -3x - 8y &= 4\end{aligned}$$

B. Is (3,-1) a solution to $x - 4y = 7$
 $4x + 3y = -9$

C. What is the equation of a horizontal line through (-3,7)

D. Draw the graph of the equation . Hint : Find x and y intercepts

$$-3x + 4y = 12$$

E. Find the equation of the line passing through the points (-2, 3) and (1, -3).

Then write the equation in slope intercept form.

F. Find the equation of the vertical line passing through the point (-5, -2)

G. Find the slope and y intercept for the graph of the equation:

$$3x + 4y = 8$$

MORE PROBLEMS:

1. **Find each rate. Sec 3.4**

- (a) Joe bikes 40 miles in 6 hours
- (b) 16 bananas cost \$19.20
- (c) Al lost 24 pounds in 8 days

2. **Word problems with proportions. Section 6.7**

Solve by setting up a proportion.

- (a) If there are 14 rotten apples in a barrel of 51, how many rotten apples would be in a barrel of 204?
- (b) Dale rode a rental bike for 4 hours and cost \$25.00. How much would it cost if Dale rode for 10 hours?
- (c) Deidra rented a bike from the same place and spent \$112.50. How long did she rent the bike for?

(d) Alice can paint 3 rooms in 7 hours. If she works for 84 hours, how many rooms can she paint?

(e) McDonald's four piece chicken nugget has 200 calories. How many calories are in a nine piece chicken nugget?

3. Graph each line and write the slope: Sec 3.3 & 3.5

(a) $x = -3$

(b) $y = 5$

(c) $5x = 15$

(d) $y = 0$

(e) $-2y = 6$

4. Graphing by intercepts. Sec 3.3

(a) Find the x -intercept and y -intercept for $5x - 4y = 20$.

(b) Graph this line using the x -intercept and y -intercept

(c) Find the x and y intercepts for $-3x + 6y = -24$

(d) Graph this line using the x -intercept and y -intercept

5. Slope: Sec 3.5

(a) Find the slope of the line containing the points whose coordinates are $(3,0)$ and $(6,9)$

(b) Find the slope of the line containing the points whose coordinates are $(-1,4)$ and $(5,-8)$

(c) Draw a line passing through coordinates $(0,4)$ with slope $-\frac{1}{4}$ through point

(d) Graph $y = -2$ and state the slope

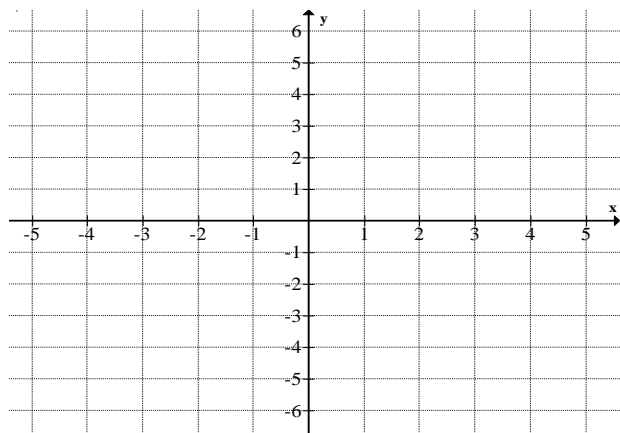
(e) Graph $8x = 24$ and state the slope

REVIEW SHEET #2 MTH 020 EXAM #2 REV 3/2017

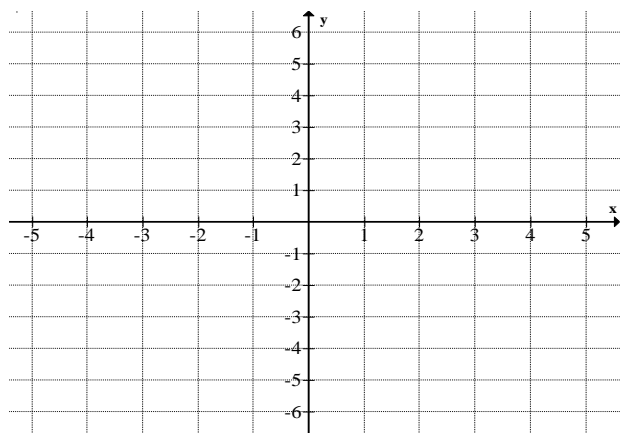
SHOULD BE DONE RIGHT BEFORE THE SECOND EXAM

NOTE TO TEACHERS: IF NECESSARY, PROVIDE AN ANSWER KEY FOR YOUR STUDENTS

NOTE TO STUDENTS: TO STUDY FOR EXAM 2, STUDY REVIEW SHEET #2, PROBLEM SET #2, AND DO MML HOMEWORK



(d) Draw a line passing through $(-2,3)$ with slope 0



6. Sec 3.6

(a) Find the slope and y-intercept of $6x + 3y = 12$.

(b) Graph the line in (a) using the slope and y-intercept.

(c) Find the slope and y-intercept of the graph of $y = -\frac{2}{3}x - 2$

(d) Graph the line in (c) using the slope and y-intercept.

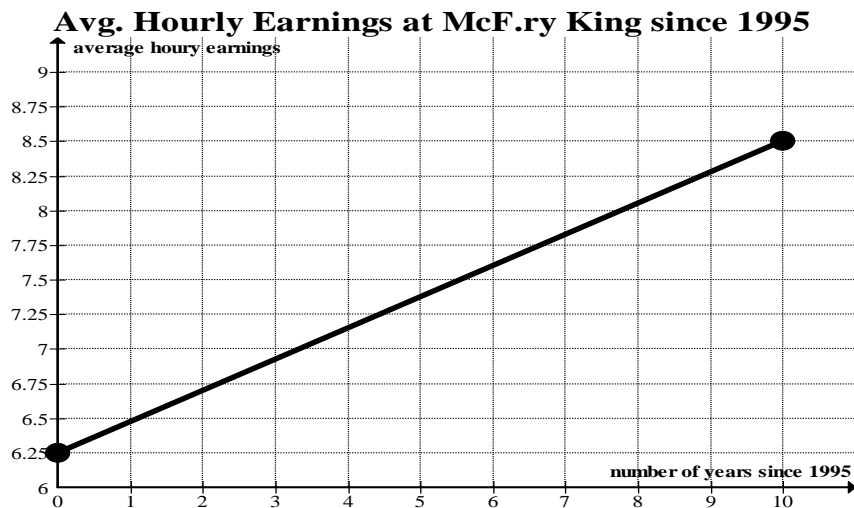
7. Sec 3.6, 3.7

NOTE TO TEACHERS: IF NECESSARY, PROVIDE AN ANSWER KEY FOR YOUR STUDENTS

NOTE TO STUDENTS: TO STUDY FOR EXAM 2, STUDY REVIEW SHEET #2, PROBLEM SET #2, AND DO MML HOMEWORK

- (a) Find the equation of the line that passes through the point whose coordinates are $(2, -1)$ and has slope 3.
- (b) Find the equation of the line that contains points whose coordinates are $(4, 1)$ and $(5, 3)$.
- (c) Find the equation of the vertical line that passes through the point whose coordinates are $(-1, 2)$
- (e) Determine whether each pair of equations represents parallel lines.
 $Y = 2x + 3$ and $7y + 2x = 4$
- (f) $y = -3x + 4$ and $6x + 2y = 10$

8. Determine an equation for this graph.



NOTE TO TEACHERS: IF NECESSARY, PROVIDE AN ANSWER KEY FOR YOUR STUDENTS

NOTE TO STUDENTS: TO STUDY FOR EXAM 2, STUDY REVIEW SHEET #2, PROBLEM SET #2, AND DO MML HOMEWORK

9. Solving a system of two equation by Graphing Method: Sec 7.1

(a) $y = 3x - 3$
 $7x + y = 7$

(b) $y = -2x + 4$
 $5x + y = 10$

(c) $y = -4x + 8$
 $x - y = 7$

(d) $3x - 2y = -6$
 $6x - y = 6$

10. Solve the system of equations by Substitution method: Sec 7.2

(a) $y = 2x - 1$
 $3y - x = 12$

11. Solving a system of two equation by Elimination by Addition Method: Sec 7.3

$-x - y = 10$
 $5x - y = -26$

12. Use any method to solve a system to find the value of the x-coordinate to the following system of equations.

$x - y = -3$
 $2x + y = 18$