Unit 3 Review

Write the equation in slope-intercept form.
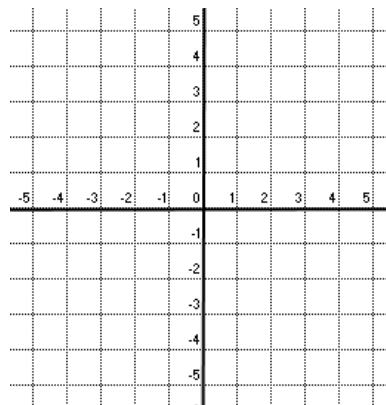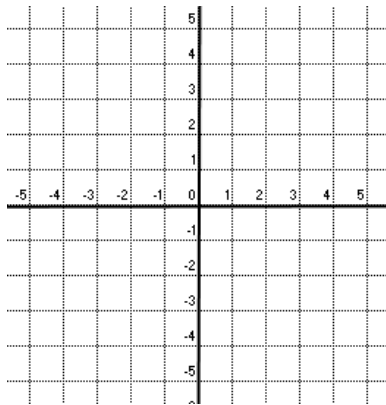
1. $2x + 5y = 10$ 2. $5x - 12y = 36$

Graph the equation of the line on the line using the slope, intercept method.

3. $-8x + 4y = -4$ 4. $3x + 3y = 9$

5. What is the slope of a horizontal line? _____

6. What is the slope of a vertical line? _____

7. Find the slope of the line passing through the points (-4, -5) and (-9, 1). Use the formula to find the slope and you must show your work. _____

8. Find the slope of the line passing through the points (8, 3) and (-4, 3). Use the formula to find the slope and you must show your work. _____

9. Find the slope and y-intercept of the line $y = 2x - 6$. m= _____ y-int= _____

10. Find the slope and y-intercept of the line $-6x + 3y = 12$. m= _____ y-int= _____

11. Find the x-intercept and y-intercept of the line $-5x + 2y = -10$.
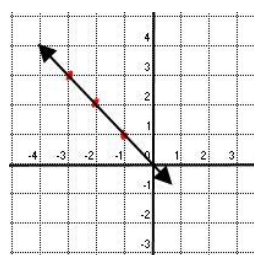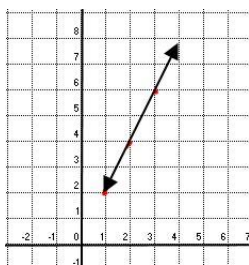
       x-int: _____   y-int: _____   remember to write as a point.

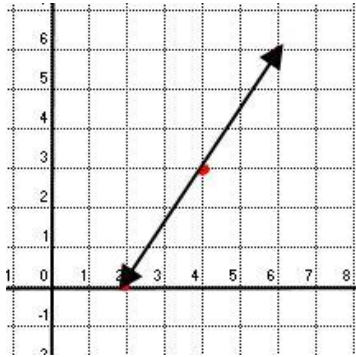12. Write the equation of the line that goes through (5, -1) & (-5, 5).

13. Find the slope and y-intercept of the line $-4x - y = 12$. m= _____ y-int= _____

14. Find the slope.   15. Find the y-intercept
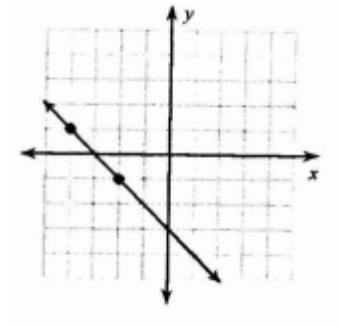
16. Write the equation of the line.　　　　　　　　17. Find the x and y-intercept.

18. Find the x-intercept and y-intercept of the line 2y = 10 − 4x.

　　x-int: _____　　　　y-int: _____　remember to write as a point.

Solve the equation

19. 6a − 2a − 3 = 9　　　　　　　　　20. 5(x − 2) = 2x + 2

21. Simplify the expression: 4(2 + m) + 5

22. Write the equation of the line in slope-intercept using (5, 3) and (0, 7).

23. Solve the equation for t:　I = Prt.

24. Evaluate the expressing for the given values. 4y + z − 2; y = 2 and z = 4.

You must highlight all numbers and 2-3 words that indicate what you are asked to find in the following problems.

25. The library is selling stickers to raise money to buy new books. If the library makes a profit of $8 for selling 14 stickers and $16 for selling 18 stickers, what is the price of each sticker?

26. Taylor is a plumber who made $275 for 2 hours work at one house and $500 for 5 hours work at another house. What is Taylor's hourly rate?

27. Jim rented a car and drove 230 miles on his vacation with a cost of $122.50. Todd rented a car and drove 400 miles on his vacation with a cost of $165. What is the mileage rate at this rental car company?

28. If a parking garage charges $4.50 to park for 5 hours and $2.50 to park for 1 hour, what is the hourly rate the garage charges?