**Foundations of Algebra 1 Mid-Term Practice Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Do all of your work on a separate sheet of paper. No work, no credit!!

\_\_\_\_ 1. : Marco charges a $75 service charge to go to a clients home for computer repairs. He also charges $50 an hour. Write an equations that represents this situation and describe what the rate of change signifies. What is the y intercept in this story?

\_\_\_\_ 2. Simplify. (7 + 3*d*) + 4

\_\_\_\_ 3. Is *x* = 4 a solution of the equation 5 – 2*x* = –1?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | no | b. | yes |

\_\_\_\_ 4. Solve. 

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5. Solve 3(x - 2) = -6 + 3x

\_\_\_\_ 6. Solve. 

\_\_\_\_ 7. Solve. 

\_\_\_\_ 8. Translate: 10 less than a number *n* is less than 13

\_\_\_\_ 9. *Solve. -2 m*

\_\_\_\_ 10. Solve 

\_\_\_\_ 11. Solve. 

\_\_\_\_ 12. Simplify. 12 + ( 20 -12 ) 2

\_\_\_\_ 13. Solve. 

\_\_\_\_ 14. Solve. 

\_\_\_\_ 15. What is the solution of the following 2x + 1 >-15 and 2 + 3x 8? Solve and graph!!

\_\_\_\_ 16. What is the solution of the following: x - 2 > 4 or -2x + 5 > 21? Solve and graph!!

\_\_\_\_ 17. Find the x and y intercepts : 3x – 4y = 24

\_\_\_\_ 18. Solve 

\_\_\_\_ 19. 

\_\_\_\_ 20. Write the equation of a line in slope intercept form that passes through (2,-1) and ( 3,4)

\_\_\_\_ 21. Write the equation of a line in point slope form that passes through (-3,1) and has a slope of -2

\_\_\_\_\_22. What is the slope of a line with the following points ( 2,2) and (-3,-4)