Review, Mathematics 104

Things you should know for the final

- 1. The properties of real numbers
- 2. How to simplify algebraic expressions
- 3. How to solve problems with percents
- 4. How to solve problems with ratios and/or proportions
- 5. How to solve linear equations in one unknown
- 6. How to linear inequalities
- 7. How to solve equations and inequalities with an absolute value
- 8. How to graph a line and a linear inequality
- 9. Find the slope intercept form of a line from the standard form
- 10. How to find the slope and intercept of a line from its equation
- 11. How to work with exponents, ie. the laws of exponents
- 12. How to add, subtract, multiply and divide polynomials
- 13. Factor polynomials using special products
- 14. Optional, divide polynomials using synthetic division
- 15. How to factor a trinomial using reverse FOIL
- 16. How to solve a quadratic equation using reverse FOIL and by using the quadratic formula.

(You will be given the quadratic formula on the final)

- 17. How to solve a polynomial equation by factoring
- 18. How to add, subtract, multiply and divide rational expressions
- 19. How to solve an equation with a rational expression
- 20. How to Solve two equations in two unknowns using at least one of the following methods
- A) Substitution
- B) Elimination
- C) Gaussian Elimination
- D) Cramer's Rule
- 21. What a function is
- 22. What the vertical line test is and how to use it
- 23. How to deal with radical expressions
- 24. How to solve equations with radical expressions.
- 25. How to add, subtract, multiply and divide complex numbers
- 26. How to solve quadratic equations whose solutions are complex numbers
- 27. How to complete the square
- 28. What a one-to-one function is
- 29. What the horizontal line test is and how to use it.
- 30. How to find an inverse function
- 31. What exponential and logarithmic function are
- 32. The rules of logs
- 33. How to find the mean, median and mode of a data set