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## Basic Algebra – Unit 13 & 14: Complex Equations

### Study Guide

**Text:** Introductory Technical Mathematics, 6th Edition, Chapter 15

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**Note:** Do “Odd” numbered problems only

1. Review course structure.
2. Read Unit 15.1: pages 383-386: Equations Consisting of Combined Operations
3. Do Exercises 15.1: page 386: # 1-29 for practice.
4. Complete
  - a. Manipulating Formulas found at: <https://www.khanacademy.org/math/algebra2/modeling-with-algebra/manipulating-formulas/v/rearrange-formulas-to-isolate-specific-variables>
  - b. Rearranging Quadratic Formulas found at: <https://www.khanacademy.org/math/algebra/one-variable-linear-equations/old-school-equations/v/solving-for-a-variable>
  - c. Rearranging Temperature Equations found at: <https://www.khanacademy.org/math/cc-eighth-grade-math/cc-8th-linear-equations-functions/8th-functions-and-function-notation/v/solving-for-a-variable-2>
  - d. Rearranging “Slope-Intercept” Equations found at: <https://www.khanacademy.org/math/cc-eighth-grade-math/cc-8th-linear-equations-functions/8th-slope/v/converting-to-slope-intercept-form>
5. Read Units 15.2 and 15.3: pages 386-389: Solving for the Unknown in Formulas
6. Complete Solving an Equation for a Variable found at: <https://www.khanacademy.org/math/algebra/one-variable-linear-equations/old-school-equations/v/solving-for-a-variable>
7. Do Exercises 15.3: pages 389-390: # 1-9 for practice.
8. Read Unit 15.4: pages 390-392: Rearranging Formulas
9. Do Exercises 15.4: pages 392-394: # 1-29 for practice.





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10. Complete:

- Complicated Equations found at: <https://www.khanacademy.org/math/algebra-basics/core-algebra-linear-equations-inequalities/core-algebra-solving-basic-equations/v/equations-2>
- Equations with the Variable in the Denominator found at: <https://www.khanacademy.org/math/in-eighth-grade-math/linear-equations-one-variable/some-more-applications-1/v/ex-2-multi-step-equation>
- Manipulating Formulas found at: <https://www.khanacademy.org/math/algebra2/modeling-with-algebra/manipulating-formulas/v/rearrange-formulas-to-isolate-specific-variables>

11. Complete Unit Lab/Test in lab. See lab instructor.





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