



Basic Algebra – Unit 1: Math and Related Symbols

Study Guide

Text: Introductory Technical Mathematics, 6th Edition

Note: Do “Odd” numbered problems only

1. Review course structure.
2. Review handout on Math Symbols found in Topic Unit 1 MR documents.
3. Read Chapter 1 pages 1-12 and page 44 of the PDF document “Understanding Algebra,” found in Topic Unit 1 MR Documents.
4. Complete problems on Exponents found at: <https://www.khanacademy.org/math/in-seventh-grade-math/exponents-powers/in-exponents/v/introduction-to-exponents>
5. Read pages 2-3 on Whole Numbers and Expanding Whole Numbers. Review the examples of each.
6. Complete problems on Natural Numbers found at: <https://www.khanacademy.org/math/pre-algebra/fractions-pre-alg/number-sets-pre-alg/v/number-sets>
7. Do page 3 Ex. 1-2 #1-8 and #17-25 for practice.
8. Read pages 4-5 on Estimating (Approximating) and Rounding to the Even. Review the examples of each.
9. Do page 4, Ex 1-3A # 1-10 and page 5 Ex 3-B # 1-8 for practice.
10. Read pages 5-7 on Addition of Whole Numbers and review all examples provided.
11. Do page 6 1-4 #1-10 and page 7 #11-22.
12. Read page 9-10 Problem Solving – Word Problem Practical Applications.
13. Read pages 10-12 on Adding and Subtracting Whole Numbers in Practical Application and review all examples. Do Ex 1-7 #1,2,3,4,5,6,8,9,11, and 13.
14. Complete problems on Number Based Systems found at: <https://www.khanacademy.org/math/pre-algebra/applying-math-reasoning-topic/alternate-number-bases/v/number-systems-introduction>
15. Review page 19 examples of Multiplying and Dividing Whole Numbers in Practical Applications (1-10) and do page 20 Exercise 1-10 #1,3,5,7,11,12,13, 15 and 20.





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16. Review page 24-25 examples of Combined Operations of Whole Numbers in Practical Applications and do page 25 Exercise 1-12 # 1,3,4,5.
17. Read page 117, 3-16 Powers and Roots of Decimal Fractions, Description of Roots Page 118, Expressions Enclosed Within the Radical Symbol, and Roots that are not Whole Numbers and review all examples.
18. Complete problems on roots found at <https://www.khanacademy.org/math/algebra/rational-exponents-and-radicals/introduction-to-rational-exponents-and-radicals/v/radical-expressions-with-higher-roots>
19. Do page 118, 3-16 A #1-21 and page 119, 3-16 B #1-12 and #17-25 for review.
20. Complete Unit Lab/Test in lab. See lab instructor.





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