

I. Some Basic Properties:

$$1. b^x = b^y \Leftrightarrow \underline{x} = \underline{y}$$

$$2. a^x = b^x \Leftrightarrow \underline{a} = \underline{b}$$

$$3. \log_b(x) = \log_b(y) \Leftrightarrow \underline{x} = \underline{y}$$

$$4. \log_a(x) = \log_b(x) \Leftrightarrow \underline{a} = \underline{b}$$

II. Examples (pp.726-727): Exercises #~~2-40~~(even),
42-98(even)

HW: pp.726-727 / Exercises #1-97(every other odd)

Final Exam – Wednesday, Dec. 18th (9:40-11:40 a.m.)

Chapters 1-9 (9.1-9.5 only): 20 problems or less

study previous Exams I-IV & quizzes 1-18...

Graph a linear function (straight line) & inequalities

Slope of a line (m), parallel vs perpendicular

Applications: %, uniform motion ($d = r \times t$), **variation**

Function notation, $f(x)$; Domain & Range

Factoring & polynomial* inequalities

Graph quadratic/exponential/logarithmic functions

Complex numbers: arithmetic & std. (**a + bi**) form

Simplify/perform arithmetic operations, and solve equations involving linear, polynomial*, rational, radical, exponential and/or logarithmic expressions

*note: quadratic expressions/equations are polynomial expressions/equations (whose degree = 2)