I. Simplifying Properties (*continued*, pp.323-325):

    4. $b^m \div b^n = b^{m-n}$

    5. $(a \div b)^n = a^n \div b^n$

    6. $b^0 = 1$ 7. $b^{-n} = 1/b^n$

II. Examples (pp.330-331): Problems #2-78(even)

III. Scientific Notation Revisited (p.327): numbers expressed in the form "**$a \times 10^n$**" where $1 \le a < 10$ and "n" is an integer...

shorthand for very large/small numbers that contain a large number of zeros (often the case w/approximate numbers)...

e.g., 4.6×10^9 yrs   age of the Earth

                 2.99×10^8 m/sec   speed of light

                 2.78×10^{-10} m H_2O molecule size

IV. Converting (between standard* & scientific notation)

  move the decimal point "n" places...

    $n > 0$ *for* large numbers

    $n < 0$ *for* small numbers

  Note: *the textbook refers to standard form as "expanded" form.

V. Examples (pp.331-333): Problems #82-108(even)

HW: pp.330-333 / Exercises #1-29(odd), 33-73(odd),

             81-107(odd)

  Read pp.335-340 (section 5.3)