

# I. Square Root Definition (p.524):

If  $x^2 = n$ , then “ $x$ ” is a square root of “ $n$ ”

*i.e.*,  $x = \sqrt{n}$

where...

“ $\sqrt{\phantom{x}}$ ” is the “radical” sign and “ $n$ ” is the “radicand”

# II. About Negatives:

1.  $x = -\sqrt{n}$  is also a square root of “ $n$ ”

2.  $n < 0 \Rightarrow \sqrt{n}$  is **NOT** a real # (*a.k.a.* undefined)

III.  $\sqrt{16} = \underline{\hspace{1cm}}$  since  $\underline{\hspace{1cm}}^2 = \underline{\hspace{1cm}}$   
 $(\sqrt{n})^2 = \underline{\hspace{1cm}}$  &  $(\sqrt{n^2}) = \underline{\hspace{1cm}}$

# IV. Examples (p.531): Problems #4-26(even), 46-54, 62-82(even)

## V. Cube Roots (p.525):

If  $x^3 = n$ , then “ $x$ ” is a cube root of “ $n$ ”

*i.e.*,  $x = \sqrt[3]{n}$

VI.  $\sqrt[3]{64} = \underline{\hspace{1cm}}$  since  $\underline{\hspace{1cm}} = \underline{\hspace{1cm}}$   
 $(\sqrt[3]{n})^3 = \underline{\hspace{1cm}}$

VII. Examples (p.531): Problems #30-38(even), **56, 58,**  
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VIII. Misc.Examples (p.532): Problems #84-92(even)

HW: pp.531-532 / Exercises #1-37(odd), 45-85(every  
other odd), 87, 89, 91, 93

Read pp.535-542 (section 8.2)