

* Understanding variables in the RADICAND

$$\sqrt{x^2}$$

expression
under the $\sqrt{\quad}$

$$\sqrt{100} = \sqrt{10^2} = 10$$

$$\sqrt{x^2} = x$$

$$\sqrt{(\text{thing})^2} = \underline{\text{thing}}$$

$$\sqrt{(lmn)^2} = lmn$$

$$\sqrt{(x^2+6x+9)} = \sqrt{(x+3)(x+3)} = \sqrt{(x+3)^2} = x+3$$

$$\sqrt{16+9} = \sqrt{25} = \text{~~5~~} = 5$$

TRUE TRUE

$$\sqrt{16+9} = \sqrt{16} + \sqrt{9} = 4 + 3 = \text{~~7~~}$$

same?