## Notes for Section 9.1 "Exploring Square Roots" (grade 7)

 $\sqrt{}$  = radical sign

 $\sqrt{25}$  = 5 (What # multiplied by itself gives you the number under the radical sign.

\*Remember from Grade 6:

$$-5 \cdot -5 = 25$$

$$-3 \cdot -3 = 9$$

\*Then  $\sqrt{49}$  could be 7 or -7 because 7 · 7 = 49 and -7 · -7 = 49. Therefore, numbers have 2 square roots.

\* $\sqrt{-81}$  Although this problem can be done, it will not happen until high school. For now, let's say that you can't take  $\sqrt{-9}$  of a negative number. Answer will be an imaginary number.

\*\*\*Show that there will be a positive and negative answer for each square root.