

***Objective:**

*The n th Root	
*If n is odd...	*If n is even...

*Labeled picture of a radical (p. 362)

- Got It?** 1. **a.** What are the real fifth roots of 0, -1 , and 32?
b. What are the real square roots of 0.01, -1 , and $\frac{36}{121}$?
c. Reasoning Explain why a negative real number b has no real n th roots if n is even.

- Got It?** 2. What is each real-number root?
a. $\sqrt[3]{-27}$ **b.** $\sqrt[4]{-81}$ **c.** $\sqrt{(-7)^2}$ **d.** $\sqrt{-49}$

* n th Roots of n th Powers

Got It? 3. What is the simplified form of each radical expression?

a. $\sqrt{81x^4}$

b. $\sqrt[3]{a^{12}b^{15}}$

c. $\sqrt[4]{x^{12}y^{16}}$

Got It? 4. In Problem 4, what are the adjusted scores for raw scores of 0 and 100?

Academics Some teachers adjust test scores when a test is difficult. One teacher's formula for adjusting scores is $A = 10\sqrt{R}$, where A is the adjusted score and R is the raw score. If the raw scores on one test range from 36 to 90, what is the range of the adjusted scores?

Inclass: p. 364 #16, 28, 30

Homework: p. 364-365 #11-29

Interactmath: TBA