Equipment Room

Coach's Corner Solutions

Unit 1: Radicals Lesson 1.1

Coach's Corner – I

1. Fill in the blanks.

$\sqrt{1}$	$= 1$	$\sqrt{81}$	$= 9$
$\sqrt{4}$	$= 2$	$\sqrt{100}$	$= 10$
$\sqrt{9}$	$= 3$	$\sqrt{121}$	$= 11$
$\sqrt{16}$	$= 4$	$\sqrt{144}$	$= 12$
$\sqrt{25}$	$= 5$	$\sqrt{169}$	$= 13$
$\sqrt{36}$	$= 6$	$\sqrt{196}$	$= 14$
$\sqrt{49}$	$= 7$	$\sqrt{225}$	$= 15$
$\sqrt{64}$	$= 8$	$\sqrt{256}$	$= 16$

2. Evaluate the following radicals and round to the nearest hundredth where needed.

   a. $\sqrt{3} = 1.73$

   b. $\sqrt{1.483} = 1.22$

   c. $\sqrt{0.00025} = 0.02$

   d. $\sqrt{1600} = 40$

3. Reorder the following radicals from least to greatest.

$$\sqrt{0.143} \quad \sqrt{3} \quad \sqrt{144} \quad \sqrt{625} \quad \sqrt{471} \quad \sqrt[3]{0.001}$$

$\sqrt[3]{0.001} = 0.1, \sqrt{0.143} = 0.37815\ldots, \sqrt{3} = 1.73205\ldots, \sqrt{144} = 12, \sqrt{471} = 21.70253..., \sqrt{625} = 25$

4. Simplify.

   a. $\sqrt[3]{27} = 3$

   b. $\sqrt{289} = 17$

5. Find the square root of 9.869604401. What is the result related to and how or where can it be used to help in math calculations? [**Hint**: circles]

   $\sqrt{9.869604401} = 3.141592654\ldots$

   π (pi) is a constant that is equal to the ratio of a circle's circumference to its diameter.

Please return to *Unit 1: Radicals Lesson 1.1* to continue your training.