

LESSON**1-1****Rational and Irrational Numbers*****Practice and Problem Solving: C*****Solve.**

1. One nickel is $\frac{39}{500}$ inch thick. Fifteen nickels are stacked vertically.

How many inches tall is the stack? Give your answer as a decimal.

2. One quarter is $\frac{191}{200}$ inch in diameter. Eight quarters are placed

side-by-side along a line. How many inches long is the line of quarters? Give your answer as a decimal.

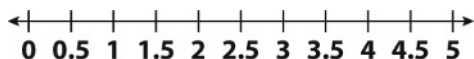
3. Is $\frac{41}{50}$ closer to $\frac{9}{11}$ or $\frac{10}{11}$? Verify your answer.

Find the two square roots of each number. (Hint: First write the decimal as a fraction.)

4. 0.25 _____ 5. 0.0625 _____ 6. $0.\overline{4}$ _____

Approximate each irrational number to the nearest hundredth without using a calculator. Then plot each lettered point on the number line.

7. A: $\sqrt{3}$ _____ 8. B: $\sqrt{18}$ _____



Answer the questions below.

9. How does finding a cube root differ from finding a square root of a positive integer? How do the answers differ?

10. Each page of a photo album holds 3 rows of 4 square photos. The area of each photo is 25 cm^2 . There is 2 cm space between photos and a 3 cm border around the group of pictures. What are the dimensions of one page of the photo album?
