Square Roots

A. Choose the correct answer:

1. The square root of 144 is.

a) 12 b) 14

c) 13 d) 15

2. The square root of $\frac{1}{4}$ is.

a) $\frac{1}{2}$ b) $\frac{2}{1}$

c) 4 d) $\frac{1}{4}$

3. $\sqrt{49} + \sqrt{121}$ equals.

a) 17 b) 18

c) 19 d) 20

4. Which of the following has a non-terminating decimal square root.

a) 81 b) 50

c) 49 d) 64

5. The square root of a perfect square number is always.

a) Irrational b) Rational

c) Prime d) Even only

B. Write the Missing Terms to Complete the Sentences:

1. The square root of 0 is _____.
2. The symbol used for square root is called the _____ sign.
3. Square root of 225 is _____.
4. If $x^2 = 36$, then x = _____ or _____.
5. The square root of a fraction is the square root of _____ and _____ separately.

C. Figure out the answers to these questions:

1. Find the square root of 0.09.
2. Find the value of $\sqrt{\frac{4}{9}}$.
3. Find two numbers whose square roots add up to 10.
4. If $\sqrt{x} = 7$, find the value of x.

5. Find the smallest number by which 72 must be multiplied to make it a perfect square

D. Mark each sentence with a True (✓) or False (✗):

1. The square root of 25 is 6. _____
2. $\sqrt{64}$ is equal to 8. _____
3. The square root of a non-perfect square is an irrational number. _____
4. $(\sqrt{5})^2 = 5$. _____
5. Square root of 1 is 1. _____

E. Challenge yourself with these questions:

1. Find the square root of 625 using prime factorization method.
2. Estimate the value of √82 to one decimal place.
3. Write the square roots of first five perfect squares.
4. Find the value of $\sqrt{\frac{16}{25}}$.
5. A number is multiplied by itself to give 324. Find the number.