Cube Root of a Negative Perfect cube

A. Choose the correct answer:

1. The cube root of −125 is.

   a) −25   b) −5

   c) 5   d) −15

2. The cube root of a negative perfect cube is always.

   a) Positive   b) Zero

   c) Negative   d) Undefined

3. Which of the following is a negative perfect cube.

   a) −64   b) −50

   c) −30   d) −10

4. Cube root of −8 is.

   a) −2   b) 2

   c) 4   d) −4

5. The cube root of −1 is.

   a) 1   b) −1

   c) 0   d) −2

B. Write the Missing Terms to Complete the Sentences:

1. The cube root of −27 is _____.

2. The cube root of a negative number is always _____.

3. $\sqrt[3]{-a}$ is equal to $-\sqrt[3]{}$ _____.

4. The cube of −4 is _____.

5. The cube root of −1000 is _____.

C. Figure out the answers to these questions:

1. Find the cube root of −343.

2. Find the cube root of −512.

3. Find the cube root of $-\dfrac{1}{8}$.

4. Explain why the cube root of a negative perfect cube is negative.

5. Find the cube root of −729.

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

1. Cube root of a negative number is positive.

2. Cube root of –64 is –4.

3. The cube of –5 is –125.

4. Cube root of –216 is –6.

5. Cube root of a negative number is undefined.

E. Challenge yourself with these questions:

1. Find the cube root of –3375.

2. Write two examples of negative perfect cubes.

3. Find the cube root of $-\dfrac{1}{27}$.

4. How does the cube root of a negative number differ from the square root of a negative number.

5. Find the cube root of –1728.