**Unit 1 Assessment Study Guide–** Square Roots and Cube Roots🖉

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| **List the first 15 perfect squares.**  | **Final Answers** |
| **1.** |  |
| **Identify the two square roots of each number.** |
| **2.** | 225 | **2.** |  |
| **3.** | 100 | **3.** |  |
| **4.** | 1 | **4.** |  |
| **Identify the cube root of each number.** |
| **5.** | 8 | **5.** |  |
| **6.** | -27 | **6.** |  |
| **Simplify each expression** |
| **7.** | $\sqrt{64}$+ $\sqrt{225}$ | **7.** |  |
| **8.** | $\sqrt{100-64}$ − $\sqrt{1}$ | **8.** |  |
| **9.** | $$\sqrt[3]{125}+\sqrt{36}$$ | **9.** |  |
| **10.** | $\sqrt{25}$ - $\sqrt{16}$ | **10.** |  |
| **Each square root is between two consecutive integers. Name the integers and approximate the square root to the nearest tenth.** |
| **11.** | $$\sqrt{21}$$ | **11.** |  |
| **12.** | $$\sqrt{220}$$ | **12.** |  |
| **13.** | $$\sqrt{91}$$ | **13.** |  |
| **14.** | −$ \sqrt{7}$ | **14.** |  |
| **Apply your knowledge by answering the following questions.** |
| **15.** | Layla is trying to determine how much fencing she will need around her garden. If he garden is a perfect square, and has an area of 25ft squared, what is the perimeter of her garden? | **15.** |  |
| **16.** | Ken is trying to fit all of his books in one box for school. If one side of his box is 3 feet in length, how much of Ken’s books will the crate hold (in cubic feet – think 3D)? | **16.** |  |
| **17.** | Lisa is designing a board game and has to build the board so that no square in the game is more than 81 square inches. What is the longest side length there could be? | **17.** |  |
| **18.** | If each table in Ms. Glavich’s classroom has an area of 225 square inches, what is the side length of each base? | **18.** |  |