

## Unit 6 Review Sections 1 – 3

**Must work out problems on another paper and show all steps.**

1. The volume of a cube is 125 cubic centimeters. How many centimeters long is each edge of the cube?
2. Erin knows that the length of the side of her square garden, in feet, is twice the square root of 121 or  $2(\sqrt{121})$ . What is the length of Erin's garden?
3. What is the value of  $\sqrt{16}$ ?
4. What is the value of  $x$  in the equation  $x^2 = 49$ ?
5. What is the square root of 0.16?
6. What would be the seventh term in the square root pattern below?

$$\sqrt{144}, \sqrt{121}, \sqrt{100}, \sqrt{81} \dots$$

7. What is the value of  $\sqrt{4^2}$ ?
8. What is the value of  $\sqrt[3]{64}$ ?
9. If  $\sqrt{25} = 5$  then, \_\_\_\_\_  $\text{cm}^2$  is the area of a square whose sides are \_\_\_\_\_  $\text{cm}$  long.
10. The area of a square garden is  $36 \text{ ft}^2$ . What is the perimeter of the garden?
11. Tyler built a square cage for his chickens. The cage has an area of  $169 \text{ ft}^2$ . What is the length of one side of the cage?
12. If  $x^2 = 7$  what is a value of  $x$ ?
13. A cube has a volume of  $216 \text{ cm}^3$ . What is the side length of the cube?
14. The volume of a cube is 1,728 cubic inches. The volume of a second cube is 729 cubic inches. What is the difference between the length of the sides of the two cubes?
15. What is the value of the expression  $\sqrt[3]{1000}$  ?
16. The area of a square classroom is  $144 \text{ ft}^2$ . How long is one side of the classroom?