

3-3**Practice: Word Problems*****The Real Number System***

<p>1. GEOMETRY If the area of a square is 33 square inches, estimate the length of a side of the square to the nearest tenth of an inch.</p>	<p>2. GARDENING Hal has a square garden in his back yard with an area of 210 square feet. Estimate the length of a side of the garden to the nearest tenth of a foot.</p>
<p>3. ALGEBRA Estimate the solution of $a^2 = 21$ to the nearest tenth.</p>	<p>4. ALGEBRA Estimate the solution of $b^2 = 67.5$ to the nearest tenth.</p>
<p>5. ARITHMETIC The geometric mean of two numbers a and b can be found by evaluating $\sqrt{a \cdot b}$. Estimate the geometric mean of 4 and 11 to the nearest tenth.</p>	<p>6. ELECTRICITY In a certain electrical circuit, the voltage V across a 20 ohm resistor is given by the formula $V = \sqrt{20P}$, where P is the power dissipated in the resistor, in watts. Estimate to the nearest tenth the voltage across the resistor if the power P is 4 watts.</p>
<p>7. GEOMETRY The length s of a side of a cube is related to the surface area A of the cube by the formula $s = \sqrt{\frac{A}{6}}$. If the surface area is 27 square inches, what is the length of a side of the cube to the nearest tenth of an inch?</p>	<p>8. PETS Alicia and Ella are comparing the weights of their pet dogs. Alicia's reports that her dog weighs $11\frac{1}{5}$ pounds, while Ella says that her dog weighs $\sqrt{125}$ pounds. Whose dog weighs more?</p>