

Name _____

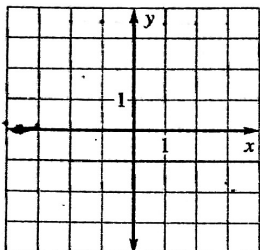
Date _____

LESSON
6.5**Practice B**

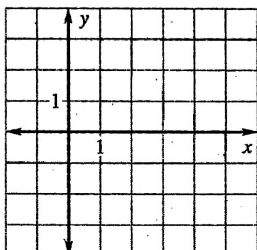
For use with pages 446–451

Graph the square root function. Then state the domain and range.

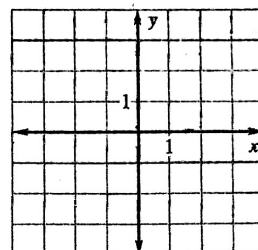
1. $f(x) = \sqrt{x} - 2$



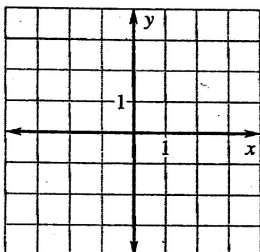
2. $f(x) = \sqrt{x - 2}$



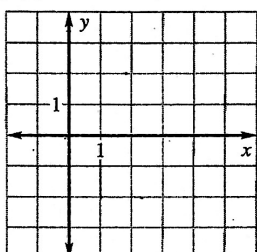
3. $f(x) = 3\sqrt{x + 1}$



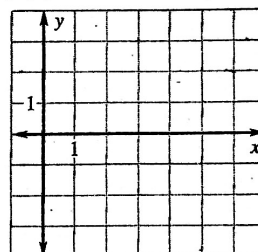
4. $f(x) = \sqrt{x + 2} - 2$



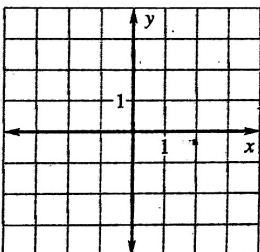
5. $f(x) = \sqrt{x - 1} + 1$



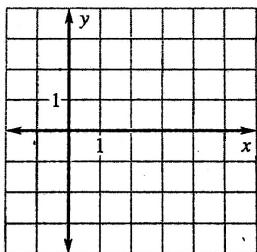
6. $f(x) = -\sqrt{x - 3}$

**Graph the cube root function. Then state the domain and range.**

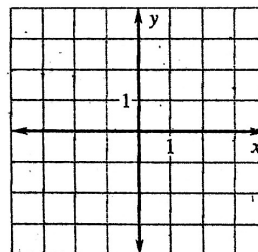
7. $f(x) = \sqrt[3]{x} + 1$



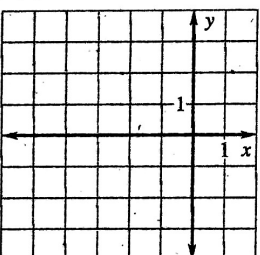
8. $f(x) = \sqrt[3]{x - 4}$



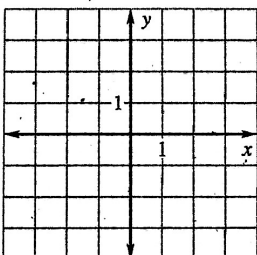
9. $f(x) = 3\sqrt[3]{x}$



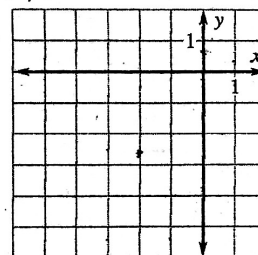
10. $f(x) = \sqrt[3]{x + 2}$



11. $f(x) = -\sqrt[3]{x} - 1$



12. $f(x) = \sqrt[3]{x + 2} - 2$

**In Exercises 13 and 14, use the following information.**

Speed of Sound The speed of sound in feet per second through air of any temperature measured in degrees Celsius is given by $V = \frac{1087\sqrt{t + 273}}{16.52}$ where t is the temperature.

13. Identify the domain and range of the function.

14. What is the temperature of the air if the speed of sound is 1250 feet per second?