3.5 practice – square root and cube root functions

Name _____   Date _____
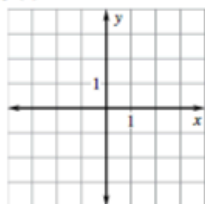
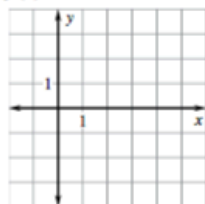**Graph the square root function. Then state the domain and range.**
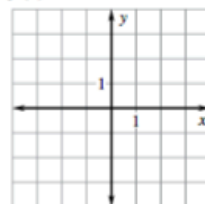
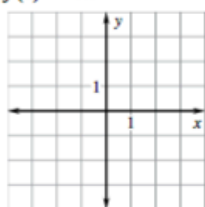**1.** $f(x) = \sqrt{x} - 2$

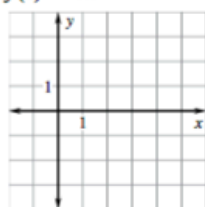**2.** $f(x) = \sqrt{x-2}$

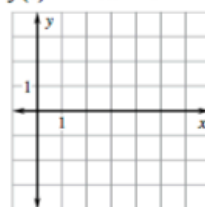**3.** $f(x) = 3\sqrt{x} + 1$

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

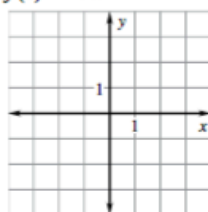**5.** $f(x) = \sqrt{x-1} + 1$
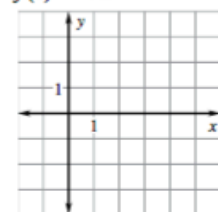
6. $f(x) = -\sqrt{x} - 3$

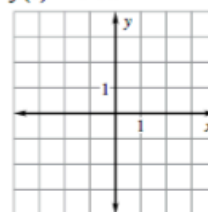**Graph the cube root function. Then state the domain and range.**
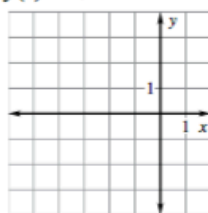
7. $f(x) = \sqrt[3]{x} + 1$
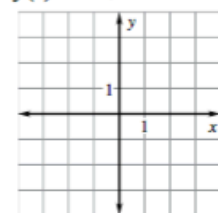
8. $f(x) = \sqrt[3]{x-4}$
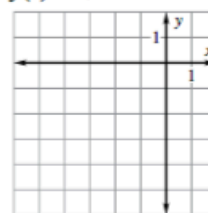
9. $f(x) = 3\sqrt[3]{x}$

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

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

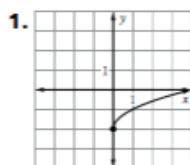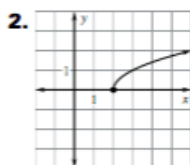**12.** $f(x) = \sqrt[3]{x+2} - 2$

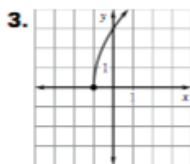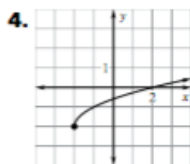# 3.5 practice – square root and cube root functions

Practice Level B

1.

domain: $x \geq 0$,
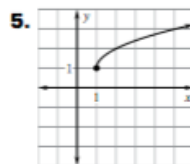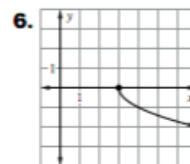range: $y \geq -2$

2.

domain: $x \geq 2$,
range: $y \geq 0$

3.

domain: $x \geq -1$,
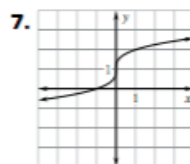range: $y \geq 0$

4.

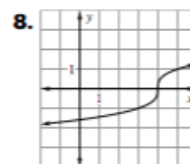domain: $x \geq -2$,
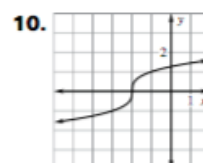range: $y \geq -2$

5.

domain: $x \geq 1$,
range: $y \geq 1$

6.
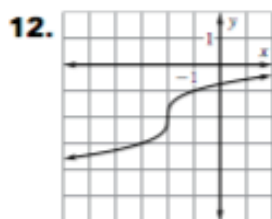
domain: $x \geq 3$,
range: $y \leq 0$

7.

domain and range:
all real numbers

8.

domain and range:
all real numbers

9.

10.

11.

domain and range:
all real numbers

12.

domain and range:
all real numbers