



**Domain and Range of Radical Functions**

*✎ Identify the domain and range of each function.*

1)  $y = \sqrt{x + 2} - 3$

8)  $y = \sqrt[3]{(2x^2 - 2)} - 4$

2)  $y = \sqrt[3]{x - 1} - 1$

9)  $y = 4\sqrt{4x^3 + 32} - 1$

3)  $y = \sqrt{x - 2} + 5$

10)  $y = \sqrt[3]{(4x + 8)} - 2x$

4)  $y = \sqrt[3]{(x + 1)} - 4$

11)  $y = 7\sqrt{-2(2x + 4)} + 1$

5)  $y = 3\sqrt{3x + 6} + 5$

12)  $y = \sqrt[5]{(4x^2 - 5)} - 2$

6)  $y = \sqrt[3]{(2x - 1)} - 4$

13)  $y = 2x\sqrt{5x^4 + 6} - 2x$

7)  $y = 6\sqrt{3x^2 + 6} + 5$

14)  $y = 6\sqrt[3]{(8x^6 + 2x + 8)} - 2$

*✎ Sketch the graph of each function.*

15)  $y = \sqrt{x} + 8$

16)  $y = 2\sqrt{x} - 4$

