## **Graphing Radicals**

Identify the domain and range of each.

1) 
$$y = \sqrt{x-2} + 5$$

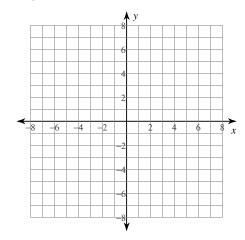
2) 
$$y = \sqrt{x+2} - 3$$

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

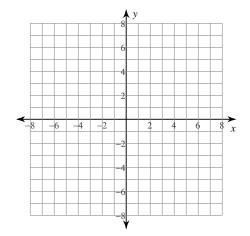
4) 
$$y = \sqrt[3]{x-1} - 1$$

Sketch the graph of each function.

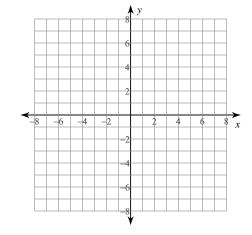
5) 
$$y = \sqrt{x} + 5$$



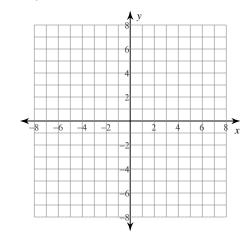
6) 
$$y = \sqrt{x} - 2$$



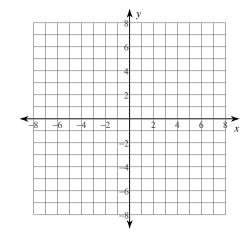
7) 
$$y = 3 + \sqrt{x}$$



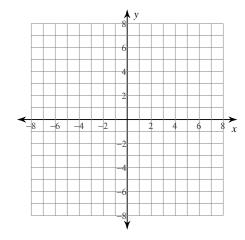
$$8) \ \ y = \sqrt{x} + 4$$



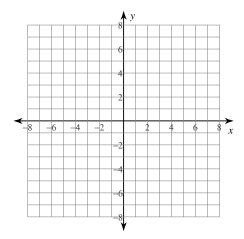
9) 
$$y = -2\sqrt{x+2}$$



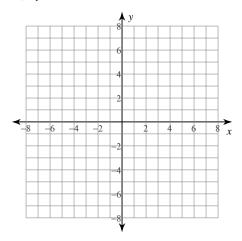
10) 
$$y = \frac{1}{2} \sqrt[3]{x+1} + 4$$



11) 
$$y = \sqrt{x-4} - 2$$

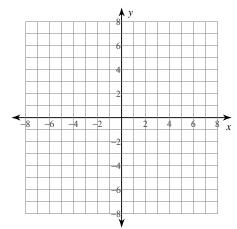


12) 
$$y = -2 + \sqrt[3]{x}$$

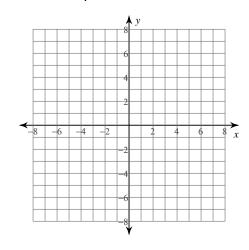


## Identify the domain and range of each. Then sketch the graph.

13) 
$$y = 4\sqrt{x-2} - 1$$



14) 
$$y = -\frac{3}{4}\sqrt{x-1} + 4$$



# Date Period

## **Graphing Radicals**

#### Identify the domain and range of each.

1) 
$$y = \sqrt{x-2} + 5$$

Domain:  $x \ge 2$ Range:  $y \ge 5$ 

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

Domain: { All real numbers. } Range: { All real numbers. }

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

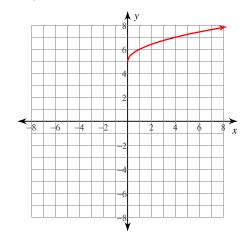
Domain:  $x \ge -2$ Range:  $y \ge -3$ 

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

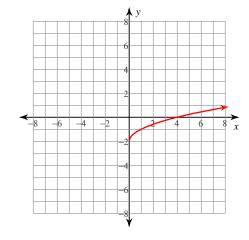
Domain: { All real numbers. } Range: { All real numbers. }

## Sketch the graph of each function.

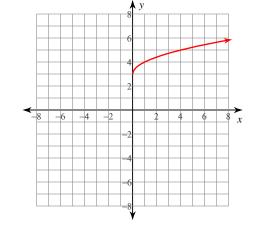
5) 
$$y = \sqrt{x} + 5$$



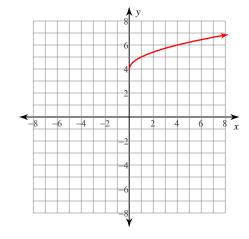
6) 
$$y = \sqrt{x} - 2$$



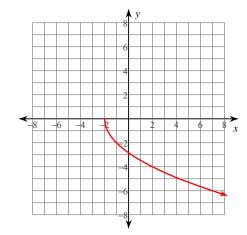
7) 
$$y = 3 + \sqrt{x}$$



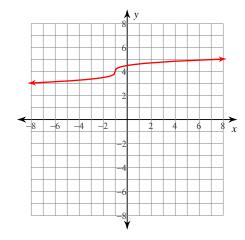
8) 
$$y = \sqrt{x} + 4$$



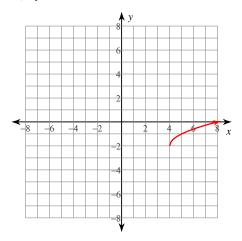
9) 
$$y = -2\sqrt{x+2}$$



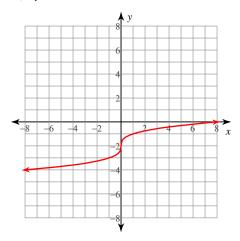
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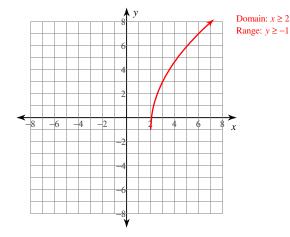


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$$y = -2 + \sqrt[3]{x}$$

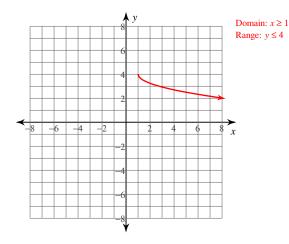


### Identify the domain and range of each. Then sketch the graph.

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