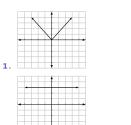
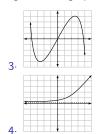
#### Lesson 2.4.1: Domain and Range of Functions

- ▶ Domain: the set of all permissible values of x that give real values for v
- Range: the set of permissible values for y or f(x) that give the values of x real numbers
- Asymptote: a line that the graph of a function approaches but never intersects

#### Practice Exercises 2.4.1

A. Determine the domain and the range of each graph.





B. Find the domain of each function

1. 
$$g(x) = 5x + 1$$

4. 
$$g(x) = \sqrt{x-8}$$

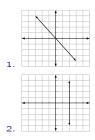
2. 
$$g(x) = \sqrt{x}$$

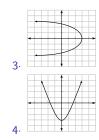
2. 
$$g(x) = \sqrt{x}$$
  
3.  $g(x) = \frac{x+4}{x-2}$ 

$$5. g(x) = \frac{3^x}{x+6}$$

## Activity 2.4.1

A. Determine the domain and the range of each graph.





B. Find the domain of each function

1. 
$$g(x) = x - 7$$

$$\sigma(x) = \sqrt{x+x}$$

2. 
$$g(x) = \sqrt{x+1}$$

3. 
$$g(x) = \frac{3x+4}{x-1}$$

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

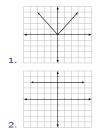
$$\sigma(x) = \frac{x+4}{x+4}$$

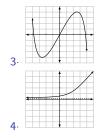
## Lesson 2.4.1: Domain and Range of Functions

- **Domain**: the set of all permissible values of x that give real
- Range: the set of permissible values for y or f(x) that give the values of x real numbers
- Asymptote: a line that the graph of a function approaches but never intersects

#### Practice Exercises 2.4.1

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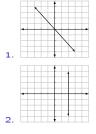
$$g(x) = \sqrt{x}$$

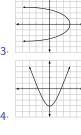
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B. Find the domain of each function.

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3. 
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3.  $g(x) = \frac{3x+4}{x-1}$ 

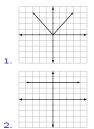
$$5. g(x) = \frac{x+4}{x-1}$$

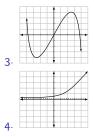
#### Lesson 2.4.1: Domain and Range of Functions

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#### Practice Exercises 2.4.1

A. Determine the domain and the range of each graph.





B. Find the domain of each function.

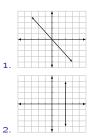
1. 
$$g(x) = 5x + 1$$

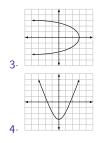
1. 
$$g(x) = 5x + 1$$
  
2.  $g(x) = \sqrt{x}$   
4.  $g(x) = \sqrt{x - 8}$ 

3. 
$$g(x) = \frac{x+4}{x+3}$$

Activity 2.4.1

A. Determine the domain and the range of each graph.





5.  $g(x) = \frac{3^{x}}{x+6}$ 

B. Find the domain of each function

1. 
$$g(x) = x - 7$$
  
2.  $g(x) = \sqrt{x + 1}$ 

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

3. 
$$g(x) = \frac{3x+4}{x-1}$$

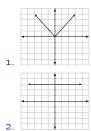
5. 
$$g(x) = \frac{x+2}{3x-1}$$

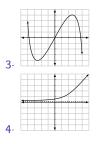
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A. Determine the domain and the range of each graph.





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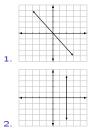
2. 
$$g(x) = \sqrt{x}$$

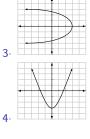
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# Activity 2.4.1

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B. Find the domain of each function.

1. 
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4. 
$$g(x) = \sqrt{2x-4}$$

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5. 
$$g(x) = \frac{x+4}{3x-5}$$