Domain and Range of a Function

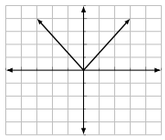
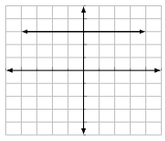
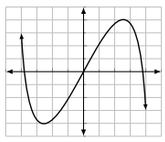
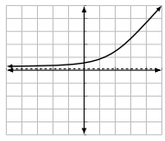
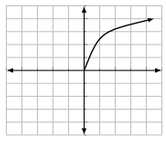
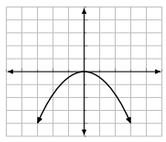
Domain: the set of all permissible values of x that give real values for y

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

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

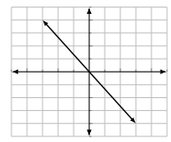
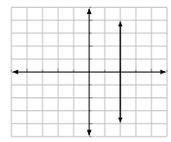
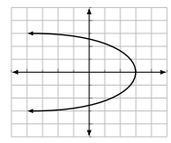
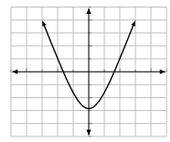
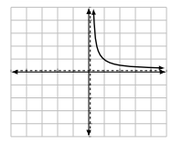
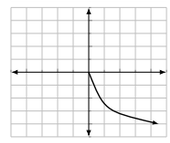
1. 
2. 
3. 
4. 
5. 
6. 

B. Find the domain of each function.

1. $g(x) = 5x + 1$
2. $g(x) = \sqrt{x}$
3. $g(x) = \dfrac{x+4}{x-2}$
4. $g(x) = \sqrt{x-8}$
5. $g(x) = \dfrac{3x}{x+6}$

Problem Set

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

1. 
2. 
3. 
4. 
5. 
6. 

B. Find the domain of each function.

1. $g(x) = x - 7$
2. $g(x) = \sqrt{x+1}$
3. $g(x) = \dfrac{3x+4}{x-1}$
4. $g(x) = \sqrt{2x-4}$
5. $g(x) = \dfrac{x+4}{3x-5}$

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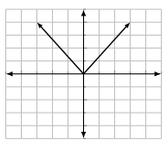
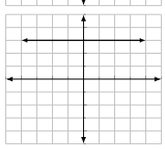
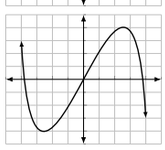
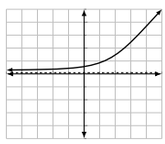
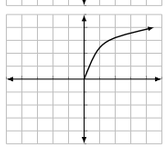
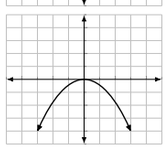
1. 
2. 
3. 
4. 
5. 
6. 

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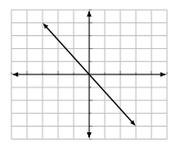
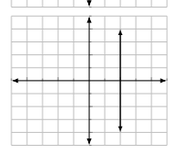
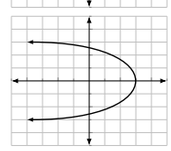
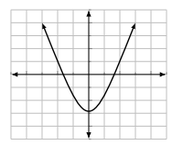
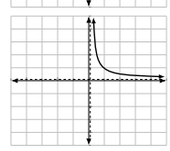
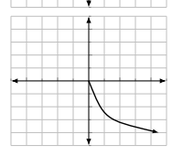
1. 
2. 
3. 
4. 
5. 
6. 

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