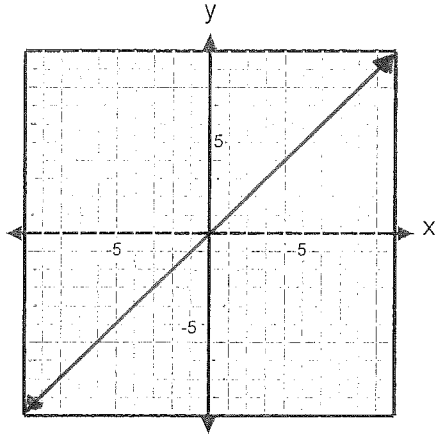


Graphing Functions

For each function, complete the table of values, sketch the graph, and state the domain and range.

Linear $y = x$

x	y
-3	
-2	
-1	
0	
1	
2	
3	

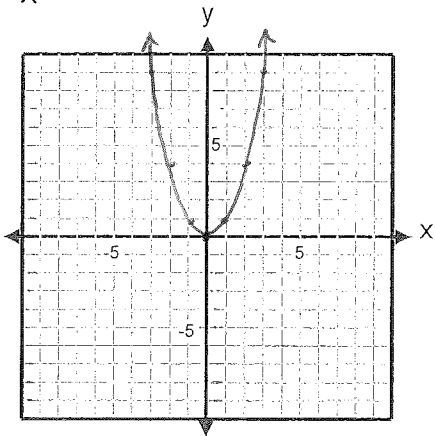


Domain: $\{x \mid x \in \mathbb{R}\}$

Range: $\{y \mid y \in \mathbb{R}\}$

Quadratic $y = x^2$

x	y
-3	
-2	
-1	
0	
1	
2	
3	

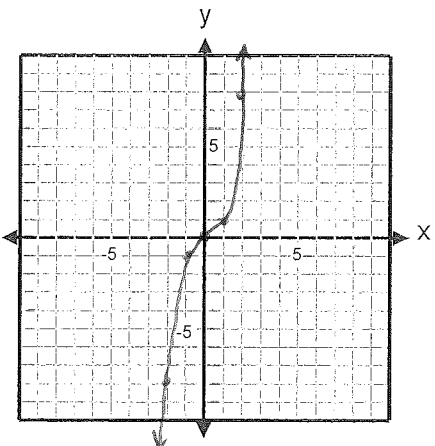


Domain: $\{x \mid x \in \mathbb{R}\}$

Range: $\{y \mid y \geq 0\}$

Cubic $y = x^3$

x	y
-2	
-1	
0	
1	
2	

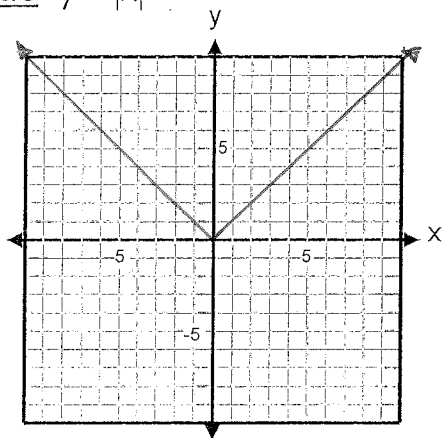


Domain: $\{x \mid x \in \mathbb{R}\}$

Range: $\{y \mid y \in \mathbb{R}\}$

Absolute-Value $y = |x|$

x	y
-3	
-2	
-1	
0	
1	
2	
3	

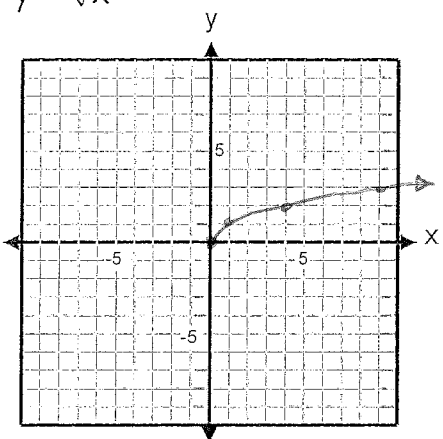


Domain: $\{x \mid x \in \mathbb{R}\}$

Range: $\{y \mid y \geq 0\}$

Square-Root $y = \sqrt{x}$

x	y
-9	
-4	
-1	
0	
1	
4	
9	

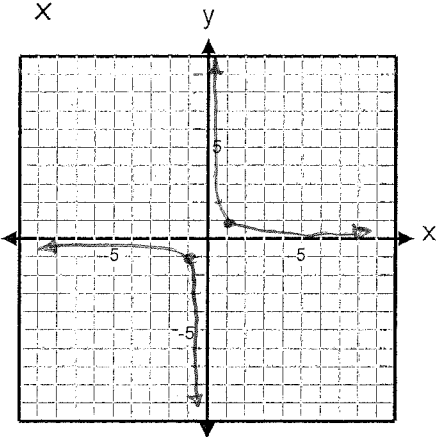


Domain: $\{x \mid x \geq 0\}$

Range: $\{y \mid y \geq 0\}$

Reciprocal $y = \frac{1}{x}$

x	y
-10	
-4	
-2	
-1	
-1/2	
-1/4	
-1/10	
0	
1/10	
1/4	
1/2	
1	
4	
10	

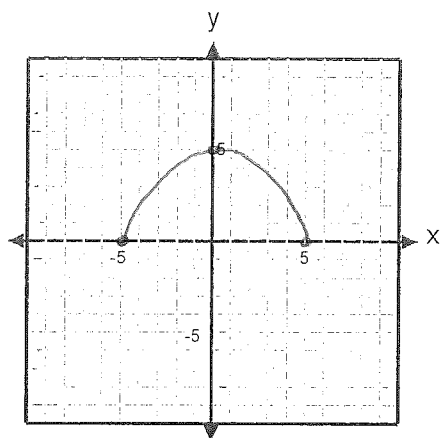


Domain: $\{x \mid x \neq 0, x \in \mathbb{R}\}$

Range: $\{y \mid y \neq 0, y \in \mathbb{R}\}$

Semi-Circle (I) $y = \sqrt{25 - x^2}$

x	y
-10	
-5	
-3	
-1	
0	
1	
3	
5	
10	

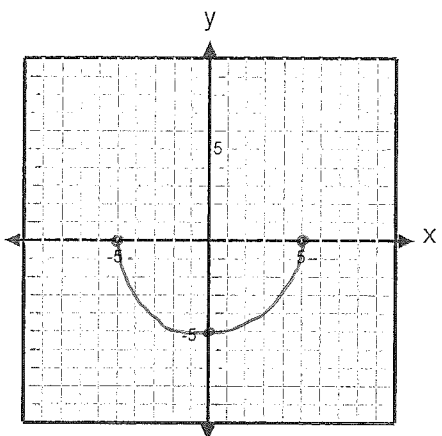


Domain: $\{x \mid -5 \leq x \leq 5\}$

Range: $\{y \mid 0 \leq y \leq 5\}$

Semi-Circle (II) $y = -\sqrt{25 - x^2}$

x	y
-10	
-5	
-3	
-1	
0	
1	
3	
5	
10	



Domain: $\{x \mid -5 \leq x \leq 5\}$

Range: $\{y \mid -5 \leq y \leq 0\}$

