





- d. The set of all possible  $y$ -values for a function is called the **range** of that function. Describe the range of the function in the graph. Explain your reasoning.

Range: \_\_\_\_\_  $\leq y \leq$  \_\_\_\_\_. Translate the inequality into words.

- e. If the endpoints of the line segment were open circles, how would the domain and the range change?

**Move to page 3.2.**

3. Grab point  $P$  and move it along the graph.
- Identify the domain using an inequality and using words.
  - Identify the range using an inequality and using words.

**Move to page 4.2.**

4. Grab point  $P$  and move it along the graph.
- Identify the domain using an inequality and using words.
  - Identify the range using an inequality and using words.



**Move to page 5.2.**

5. Grab and move the endpoints of the line segment to satisfy each of the following conditions.
- a. The open endpoint is  $(-3, -5)$  and the closed endpoint is  $(5, 4)$ . Identify the domain and range using inequalities and using words.
  
  
  
  
  
  
  
  
  
  
  - b. The domain is between  $-2$  and  $1$ , including  $1$ , and the range is between  $-6$  and  $5$ , including  $-6$ . Write the domain and range as inequalities. Identify the endpoints of the line segment, and indicate which endpoint is open.
  
  
  
  
  
  
  
  
  
  
  - c. The domain is  $-3 < x \leq 6$  and the range is  $y = 3$ . Identify the endpoints of the line segment, and indicate which endpoint is open.
  
  
  
  
  
  
  
  
  
  
  - d. The domain is  $x = 6$  and the range is  $-5 < y \leq 3$ . Identify the endpoints of the line segment, and indicate which endpoint is open.