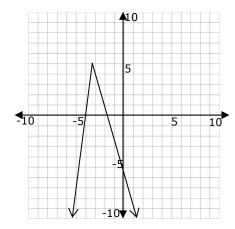
## **Domains and Ranges of Functions - Step-by-Step Lesson**

Determine the range of the function in the graph below.



a 
$$\{y \mid y \le 5\}$$

b 
$$\{y \mid y \ge 5\}$$

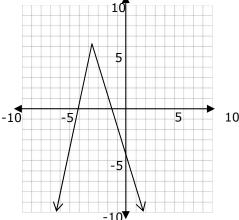
c {all real numbers}

$$d \{ y \mid y < 5 \}$$

## **Explanation:**

The range of a function is the set of all possible y-values.

The largest y-value on the graph appears below the vertex where y is 5. All the other points on the graph appear below the vertex, where y is less than 5.



So, the range is the set of all real numbers less than or equal to 5. This can be written as  $\{y \mid y \le 5\}$ .