



## Identifying Domain and Range

*Elaborate – Answer Key*

**Directions:** Cut out each of the cards on the following page. Match the graph to the inequality representing its domain and range. Answer the debriefing questions.

### STAAR Mission Support Memo

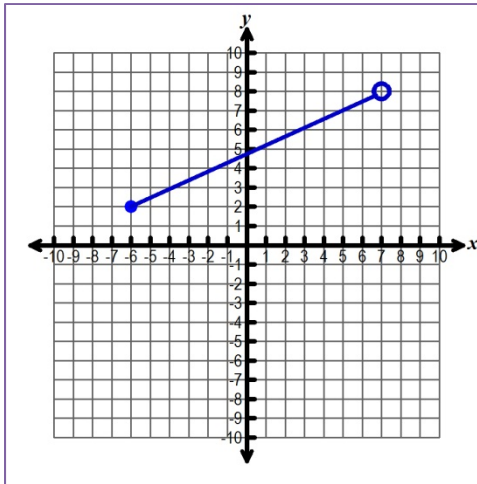
- An open circle endpoint is used to indicate “not equal to” or “excludes”
- A closed circle endpoint is used to indicate “equal to” or “includes”

### Debriefing Questions

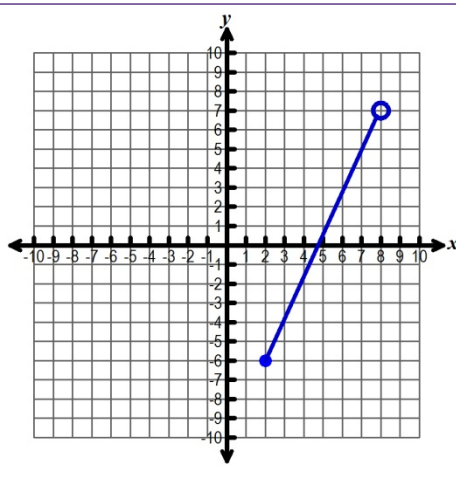
1. How did knowing the endpoints of the graph help you determine the domain and/or range?  
*The open circle may indicate the use of the less than symbol (<) and the closed circle may indicate the use of the less than or equal to symbol (≤).*
  
2. How does finding a maximum or minimum value in a curved graph help you determine the domain and/or range?  
*The minimum value indicates the lowest possible y-value for the range, and the maximum value indicates the highest possible y-value for the range.*

$y = 4(2)^x$	$y = 3x^2 - 5$
$-\infty \leq x < \infty$	$-\infty \leq x < \infty$
$0 < y < \infty$	$-5 \leq y < \infty$

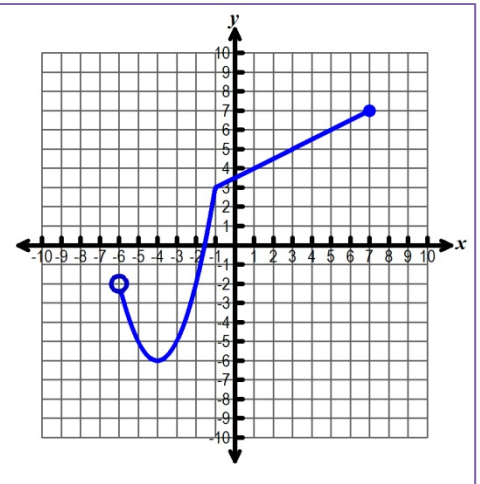




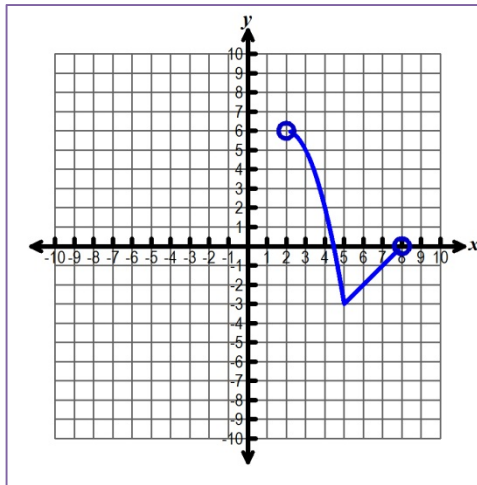
$-6 \leq x < 7$
$2 \leq y < 8$



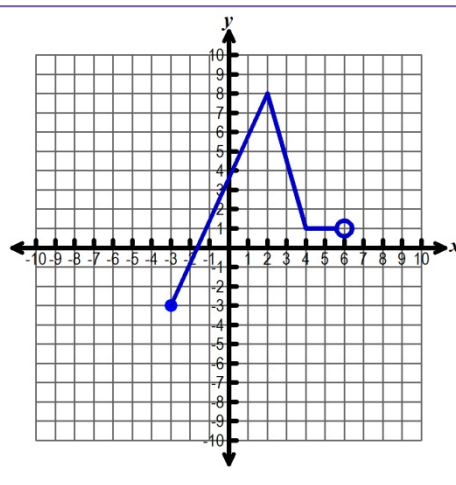
$2 \leq x < 8$
$-6 \leq y < 7$



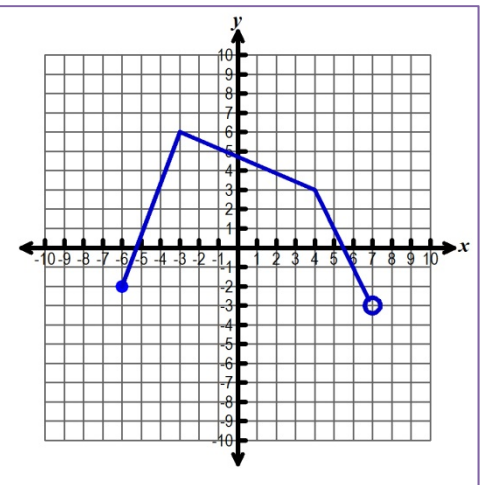
$-6 < x \leq 7$
$-6 \leq y \leq 7$



$2 < x < 8$
$-3 \leq y < 6$



$-3 \leq x < 6$
$-3 \leq y \leq 8$



$-6 \leq x < 7$
$-2 < y \leq 6$

