

\in "is an element of"

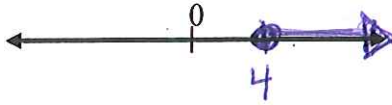
["including" ("exclusively")

NAME: Key

Practice: Interval Notation

Put in interval notation AND draw a graph of each inequality.

1. $x \geq 4$



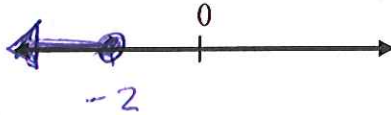
1. $x \in [4, \infty)$

2. $x < 6$



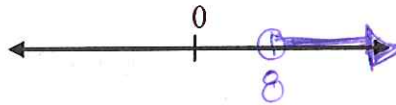
2. $x \in (-\infty, 6)$

3. $x \leq -2$



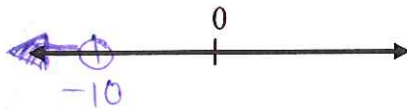
3. $x \in (-\infty, -2]$

4. $x > 8$



4. $x \in (8, \infty)$

5. $x < -10$



5. $x \in (-\infty, -10)$

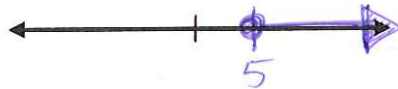
Write each interval as an inequality, and draw a graph for each.

6. $(-\infty, -8]$



6. $x \leq -8$

7. $[5, \infty)$



7. $x \geq 5$

8. $(-2, \infty)$



8. $x > -2$

9. $[-10, \infty)$



9. $x \geq -10$

10. $(-\infty, 6)$



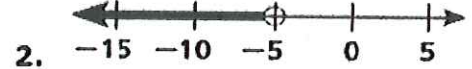
10. $x < 6$

For each number line, write the given set of numbers in interval notation. → inequality AND



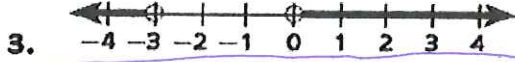
$x \in (-3, 5]$

$-3 < x \leq 5$



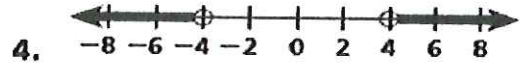
$x \in (-\infty, 5)$

$x < 5$



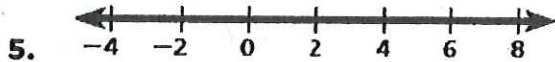
$x \in (-\infty, 3) \cup (0, 4)$

$x < 3$ or $x > 0$



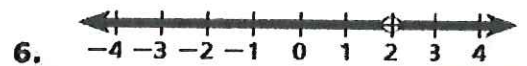
$x \in (-\infty, -4) \cup (4, \infty)$

$x < -4$ or $x > 4$



$x \in (-\infty, \infty)$

$x \in \mathbb{R}$

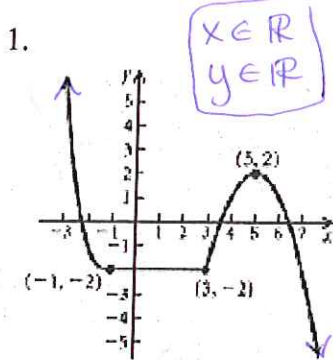


$x \in (-\infty, 2) \cup (2, \infty)$

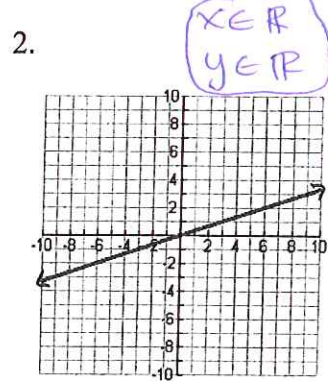
$x < 2$ or $x > 2$

$x \neq 2$

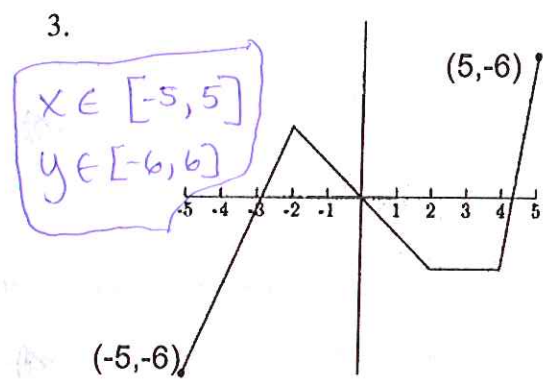
Name the domain and range of each relation using interval notation.



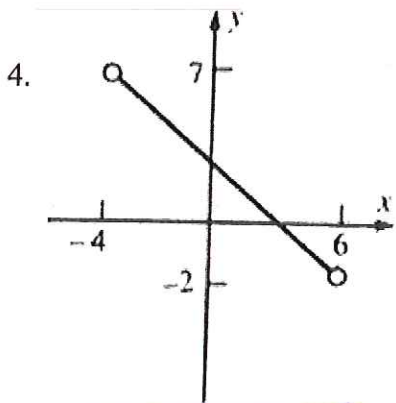
$x \in \mathbb{R}$
 $y \in \mathbb{R}$



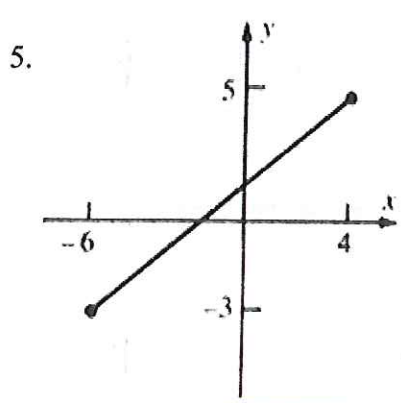
$x \in \mathbb{R}$
 $y \in \mathbb{R}$



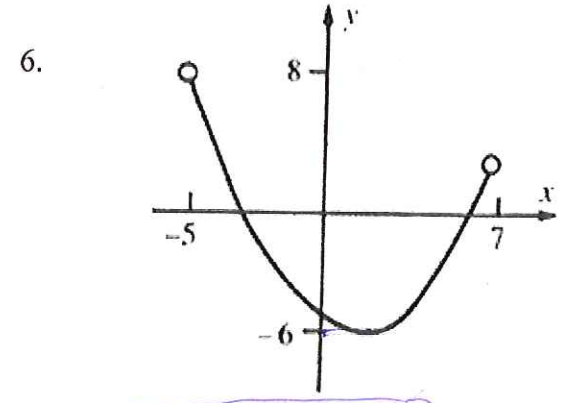
$x \in [-5, 5]$
 $y \in [-6, 6]$



$x \in (-4, 6)$
 $y \in (-2, 7)$



$x \in [-6, 4]$
 $y \in [-3, 5]$



$x \in (-5, 7)$
 $y \in [-6, 8)$