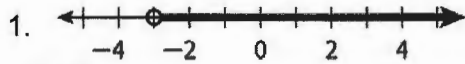


LESSON
1-1

Domain, Range, and End Behavior

Practice and Problem Solving: A/B

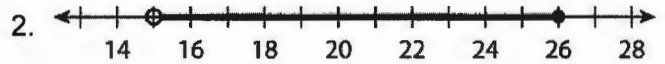
Describe the interval shown using an inequality, set notation, and interval notation.



Inequality: _____

Set Notation: _____

Interval Notation: _____



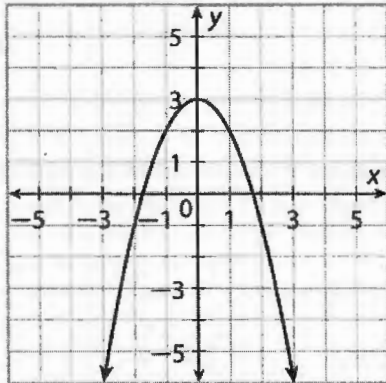
Inequality: _____

Set Notation: _____

Interval Notation: _____

Describe the domain and range of the graph using an inequality, set notation, and interval notation. Then describe its end behavior.

3. Graph of $f(x) = -x^2 + 3$:



Domain:

Inequality: _____

Set Notation: _____

Interval Notation: _____

Range:

Inequality: _____

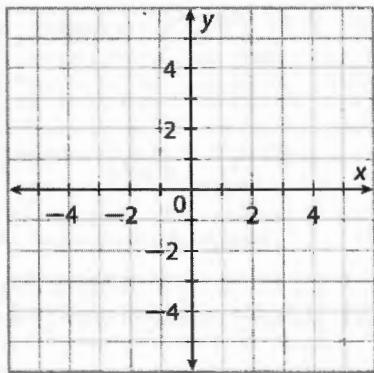
Set Notation: _____

Interval Notation: _____

End Behavior:

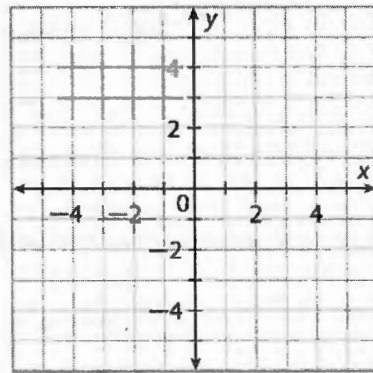
Draw the graph of the function with its given domain. Then determine the range using interval notation.

4. $g(x) = -3x + 2$ with domain $(-1, 2]$:



Range: _____

5. $h(x) = 0.5x - 1$ with domain $(-\infty, 4)$:



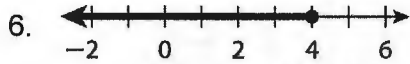
Range: _____

LESSON
1-1

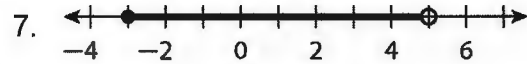
Domain, Range, and End Behavior

Practice and Problem Solving: Modified

Describe the given number line or inequality using the notation indicated. The first one is done for you.



Set Notation: $\{x \mid x \leq 4\}$



Inequality: _____

8. $x \geq -7$

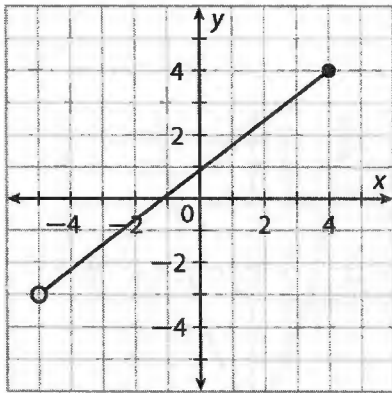
Interval Notation: _____

9. $16 \leq x < 54$

Set Notation: _____

Use set notation to describe the domain and range of each graph. The first one is done for you.

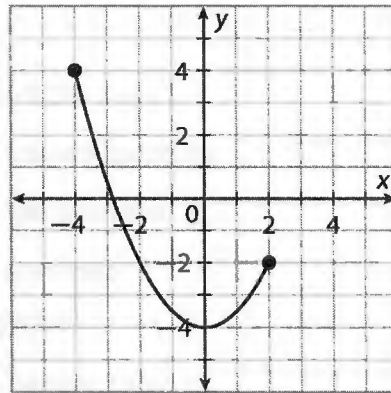
10.



Domain: _____

Range: _____

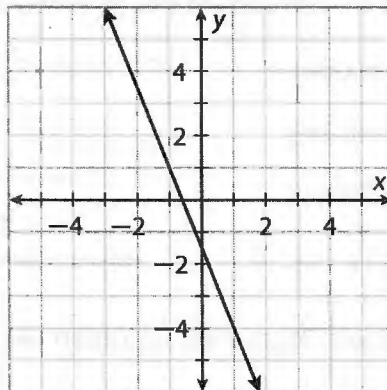
11.



Domain: _____

Range: _____

12. Fill in the blank to describe the end behavior of the graph shown below.



As $x \rightarrow +\infty$, $f(x) \rightarrow$ _____. As $x \rightarrow -\infty$, $f(x) \rightarrow$ _____.