

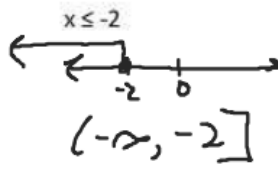
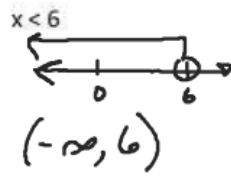
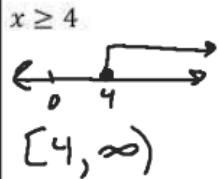
What you will learn about:
Graphing Quadratics

Interval Notation

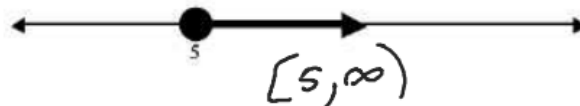
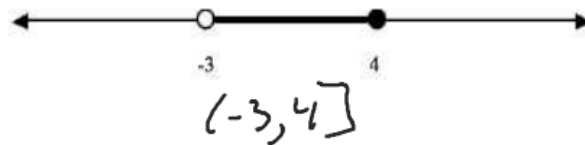
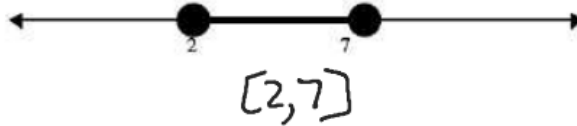
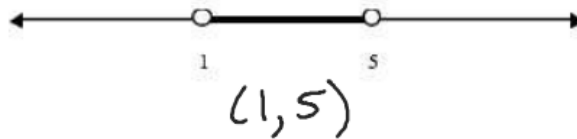
\leq, \geq []

$<, >$ ()

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



Put each in set and interval notation



Domain

Input
X-values

Range

Output
Y-values

Increasing

As move from left \rightarrow
Right y-values increase

Decreasing

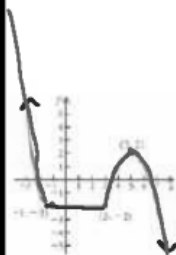
As move L \rightarrow R y-values

Decrease

Constant

As move L \rightarrow R y-values
Stay the same.

Find the Domain and range of each graph. Put your answer in both set and interval notation. Give the intervals of increasing, decreasing, and constant.



D: $(-\infty, \infty)$

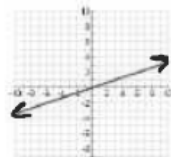
R: $(-\infty, \infty)$

Decreasing $(-\infty, -1)$

Constant $(-1, 2)$

Increasing $(2, \infty)$

18.



D: $(-\infty, \infty)$

R: $(-\infty, \infty)$

Inc $(-\infty, \infty)$

19.



D: $[-5, 5]$

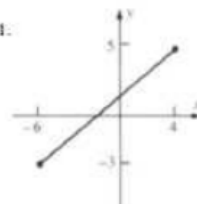
R: $[-6, 6]$

Increasing $(-5, 2)$ $(4, 5)$

Decreasing $(2, 4)$

Constant $(2, 4)$

21.

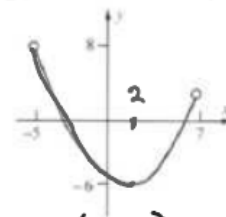


D: $[-4, 4]$

R: $[-3, 5]$

Increasing
 $(-4, 4)$

22.



D: $(-5, 7)$

R: $(-6, 8)$

Decreasing $(-5, 2)$

Increasing $(2, 7)$