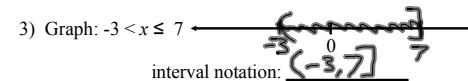
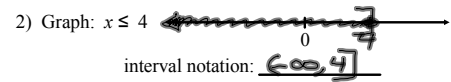
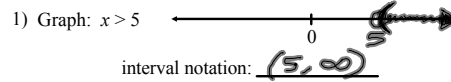


Algebra II

G-3

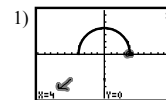
Interval Notation, Domains, and Ranges



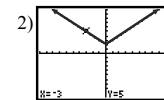
Domain -
actual - Set of all possible inputs
helpful- left + right restrictions

Range -
actual - Set of all possible outputs
helpful- up + down restrictions

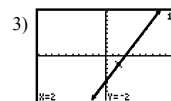
Label the domain and range of each graph using interval notation.



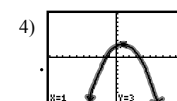
domain: $[-4, 4]$
range: $[0, 1]$



domain: $(-\infty, \infty)$ or \mathbb{R}
range: $[2, \infty)$

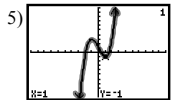


domain: \mathbb{R}
range: \mathbb{R}

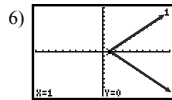


domain: $(-\infty, \infty)$ \mathbb{R}
range: $(-\infty, 1]$

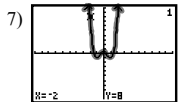
Label the domain and range of each graph using interval notation.



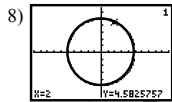
domain: \mathbb{R}
range: \mathbb{R}



domain: $[1, \infty)$
range: \mathbb{R}



domain: \mathbb{R}
range: $[-1, \infty)$



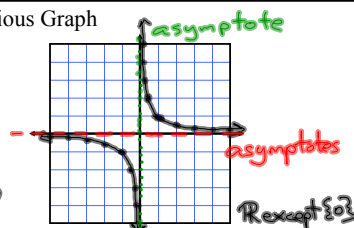
domain: $[-5, 5]$
range: $[-3, 5]$

$(0, \emptyset)$ A Curious Graph

$1 \div \frac{1}{2}$
 $1 \cdot \frac{2}{1}$

$y = \frac{1}{x}$

- $(1, 1)$ $(-1, -1)$
- $(2, \frac{1}{2})$ $(-2, -\frac{1}{2})$
- $(3, \frac{1}{3})$ $(-3, -\frac{1}{3})$
- $(4, \frac{1}{4})$ $(-4, -\frac{1}{4})$
- $(5, \frac{1}{5})$ $(-5, -\frac{1}{5})$
- $(\frac{1}{2}, 2)$
- $(\frac{1}{3}, 3)$



domain: $(-\infty, 0) \cup (0, \infty)$
range: \mathbb{R} except $\{0\}$

asymptote - a line a graph keeps getting closer to, but never touches.

Assignment
Chapter G, Section 3
Handout