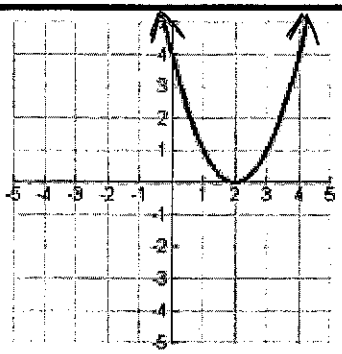
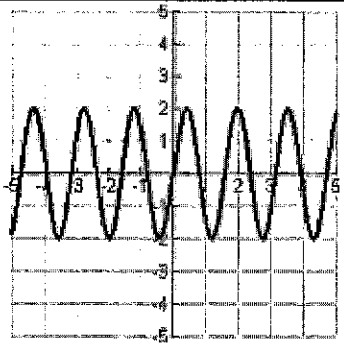
Algebra 3-4
Ch 1 Day 2 Domain and Range

Name: _____ Per: _____
August 31/September 1, 2016

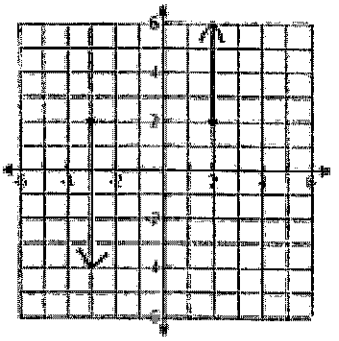
1. Find the domain and range for each graph. Then determine if the graph is a function.



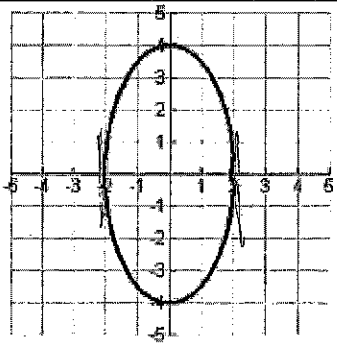
D: $(-\infty, \infty)$ R: $[0, \infty)$
Function: Yes



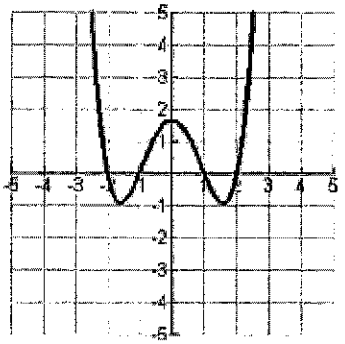
D: $(-\infty, \infty)$ R: $[-2, 2]$
Function: Yes



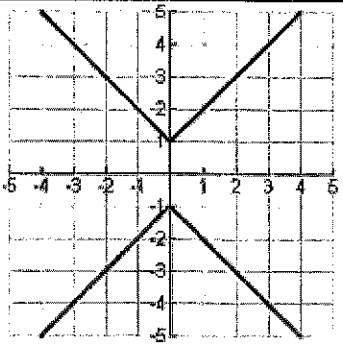
D: $-3, 2$ R: $(-\infty, \infty)$
Function: No



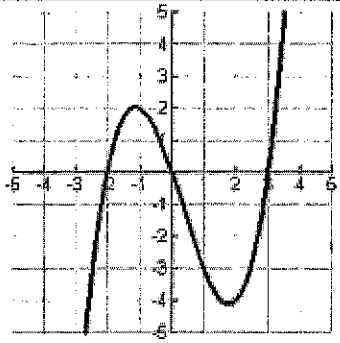
D: $[-2, 2]$ R: $[-4, 4]$
Function: No



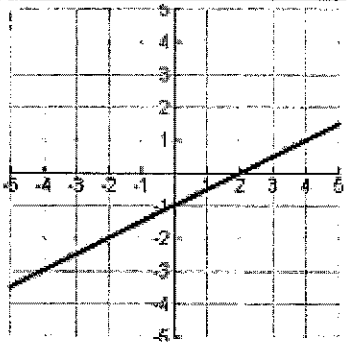
D: $(-\infty, \infty)$ R: $[-1, \infty)$
Function: Yes



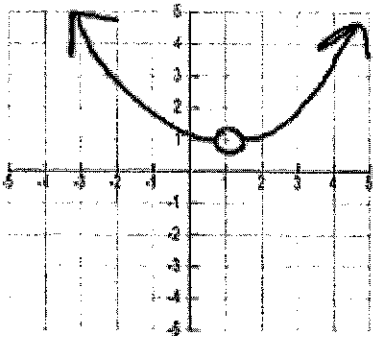
D: $(-\infty, \infty)$ R: $(-\infty, -1] [1, \infty)$
Function: No



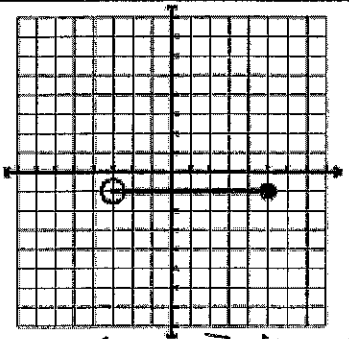
D: $(-\infty, \infty)$ R: $(-\infty, \infty)$
Function: Yes



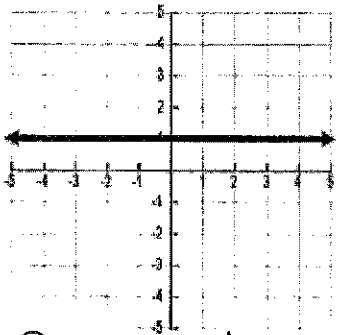
D: $(-\infty, \infty)$ R: $(-\infty, \infty)$
Function: Yes



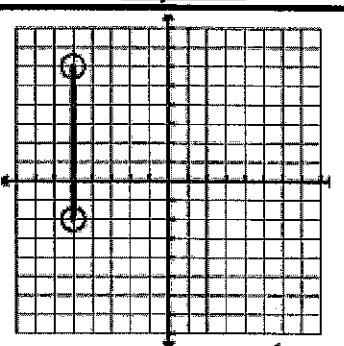
D: $(-\infty, 1) (1, \infty)$ R: $(1, \infty)$
Function: Yes



D: $(-3, 5]$ R: -1
Function: Yes



D: $(-\infty, \infty)$ R: (1)
Function: Yes

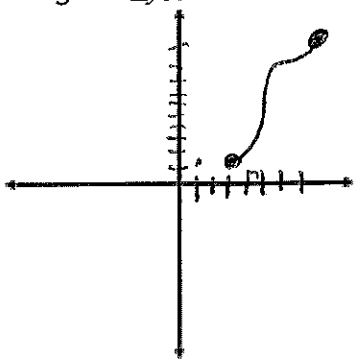


D: -5 R: $(-2, 6)$
Function: No

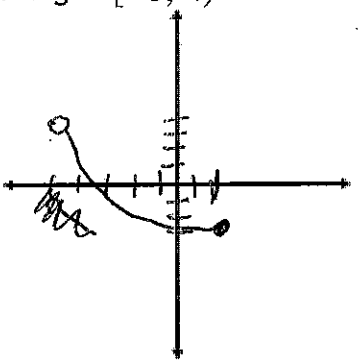
D:_____ R:_____ Function:_____	D:_____ R:_____ Function:_____	D:_____ R:_____ Function:_____

2. Sketch a graph with the given domain and range:

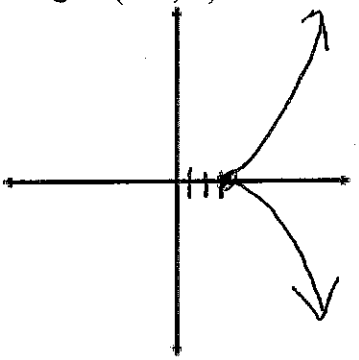
Domain: $3 \le x \le 7$
Range: $1 \le y \le 10$



Domain: $(-5, 2]$
Range: $[-3, 4)$

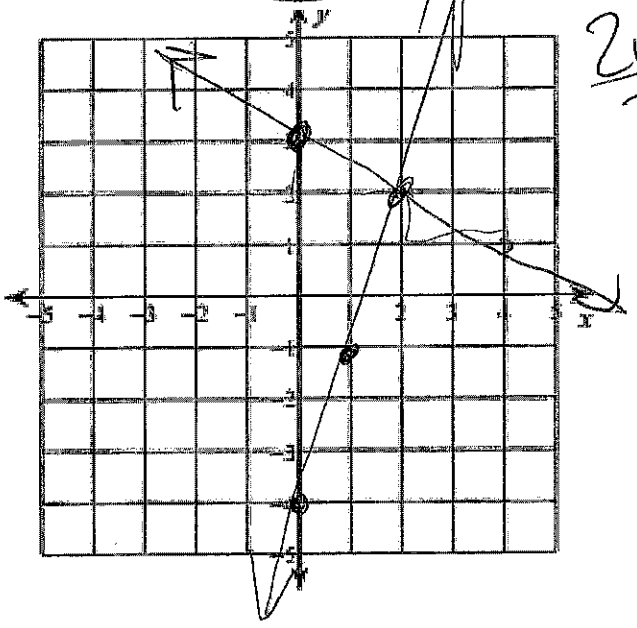


Domain: $[3, \infty)$
Range: $(-\infty, \infty)$



3. Solve the system graphically:

$\{y = 3x - 4$ $x + 2y = 6$



How could you solve this without a graph?

$\frac{2y}{2} = \frac{6 - x}{2}$

$y = 3 - \frac{1}{2}x$

Substitution or Elimination

$x = 2, y = 2$

4. Solve the system WITHOUT graphing.

$\{-4x + y = 6$ $-5x - y = 21$

$-5x - y = 21$

$-9x = 27$

$\frac{-9x}{-9} = \frac{27}{-9}$

$x = -3$

$-4(-3) + y = 6$

$12 + y = 6$

$-12 \quad -12$

$y = -6$