Algebra 1

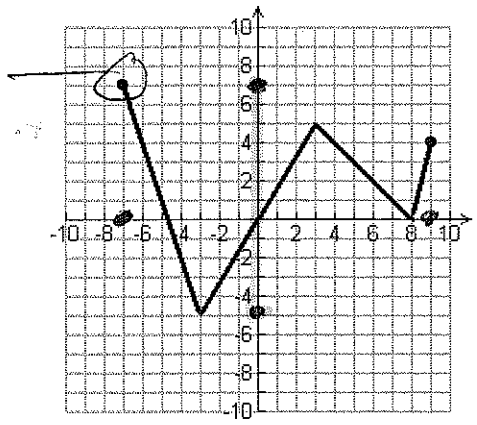
Day 2:Functions/ Domain&Range
Homework

Name HW Key
Date _____ Period ____

1. Determine whether each graph represents a continuous or discrete relation, then circle.
2. Determine the appropriate domain and range for each.

a. (continuous) or discrete ??

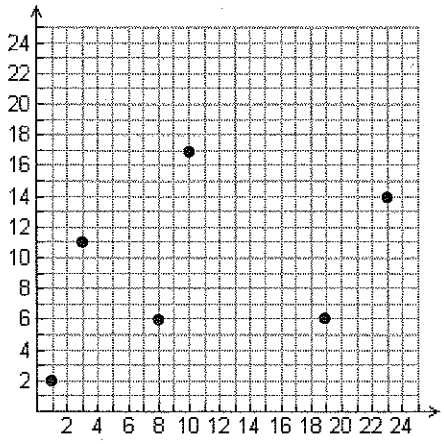
filled in



Domain $-7 \le x \le 9$

Range $-5 \le y \le 7$

b. continuous or (discrete) ??



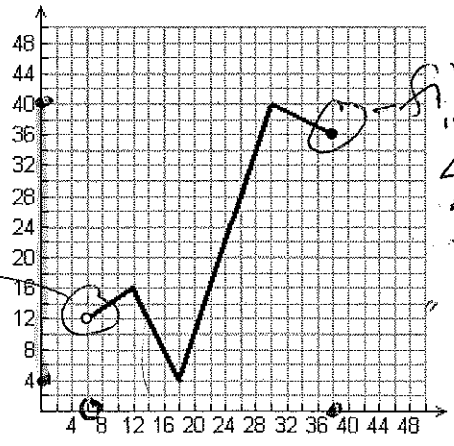
Domain $\{1, 3, 8, 10, 19, 23\}$

Range $\{2, 6, 11, 14, 17\}$

c. (continuous) or discrete ??

open

filled in

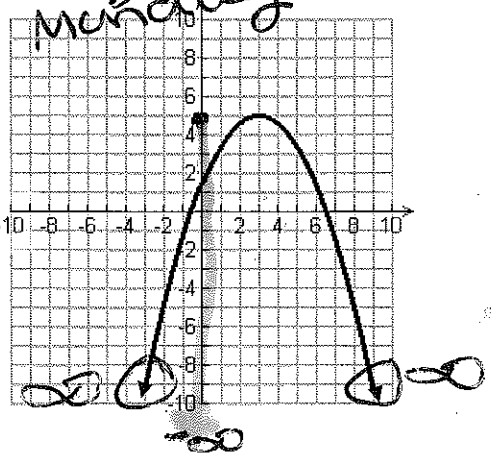


Domain $6 < x \le 38$

Range $4 \le y \le 40$

d. (continuous) or discrete ??

☆ We'll go over Monday



Domain $-\infty < x < \infty$

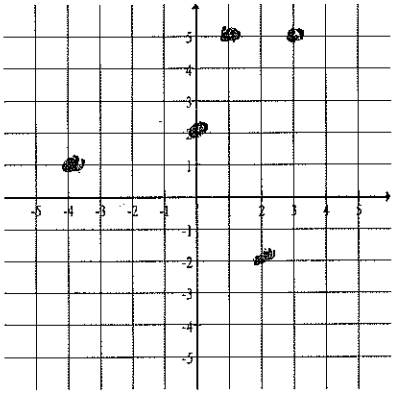
Range $-\infty < y \le 5$

Pre AP D: $\mathbb{R}$ all real numbers
R: $\mathbb{R}$ $y \le 5$

Algebra 1 Homework

3. Complete the following for these ordered pairs:
{(-4, 1), (0, 2), (1, 5), (2,-2), (3,5)}

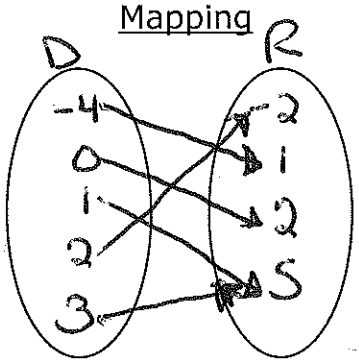
Graph



Table

X input	Y output
-4	1
0	2
1	5
2	-2
3	5

Mapping



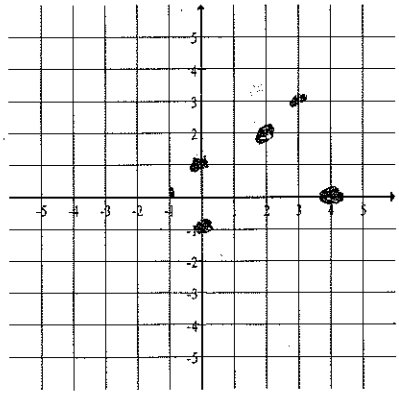
Domain: {-4, 0, 1, 2, 3}

Range: {-2, 1, 2, 5}

Is this a function? Explain. Yes
Function - no repeating x-values
→ Passes the vertical line test
→ Only 1 arrow from each domain element

4. Complete the following for the these ordered pairs:
{(0, -1), (0, 1), (2, 2), (3,4), (4,0)}

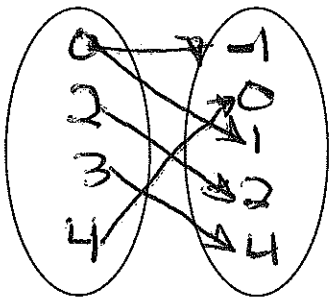
Graph



Table

X input	Y output
0	-1
0	1
2	2
3	4
4	0

Mapping



Domain : {0, 2, 3, 4}

Range: {-1, 0, 1, 2, 4}

Is this a function? Explain.
Non-Function
- The x-value of zero has two outputs
→ fails the vertical line test on the graph