

Multiple Representations of Functions

Activity

Name KEY

Date _____ Period _____

Example 1

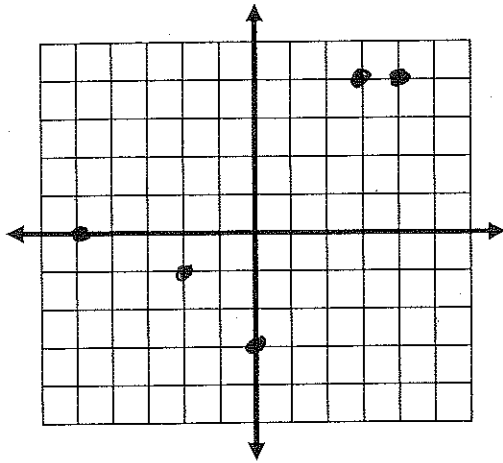


Table of Values

| x | f(x) |
|----|------|
| -5 | 0 |
| -2 | -1 |
| 0 | -3 |
| 3 | 4 |
| 4 | 4 |

Ordered Pairs

- $(-5, 0)$
- $(-2, -1)$
- $(0, -3)$
- $(3, 4)$
- $(4, 4)$

Example 2

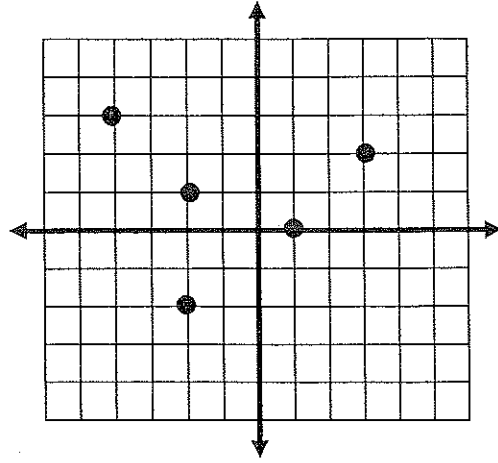
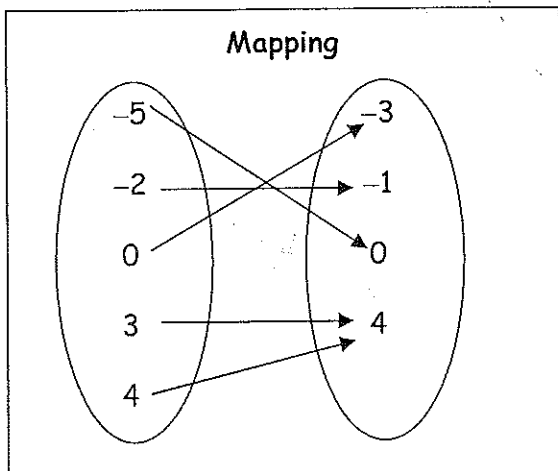


Table of Values

| x | f(x) |
|----|------|
| -4 | 3 |
| -2 | 1 |
| -2 | -2 |
| 1 | 0 |
| 3 | 2 |

Ordered Pairs

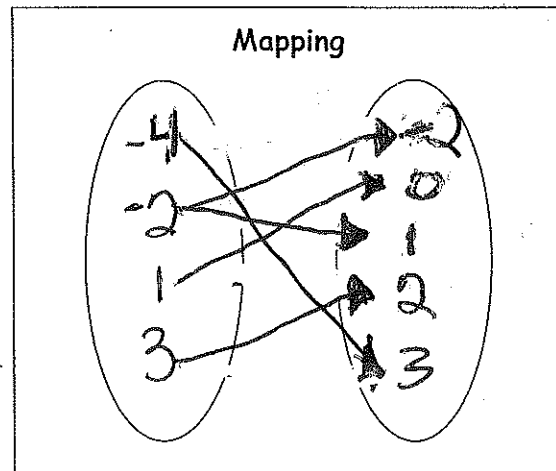
- $(-4, 3)$
- $(-2, 1)$
- $(-2, -2)$
- $(1, 0)$
- $(3, 2)$



Domain $\{-5, -2, 0, 3, 4\}$

Range $\{-3, -1, 0, 4\}$

Function? Yes No
 Justify. only 1 arrow for each x-value



Domain $\{-4, -2, 1, 3\}$

Range $\{2, 0, 1, 2, 3\}$

Function? Yes No
 Justify. Doesn't pass the vertical line test

Example 3

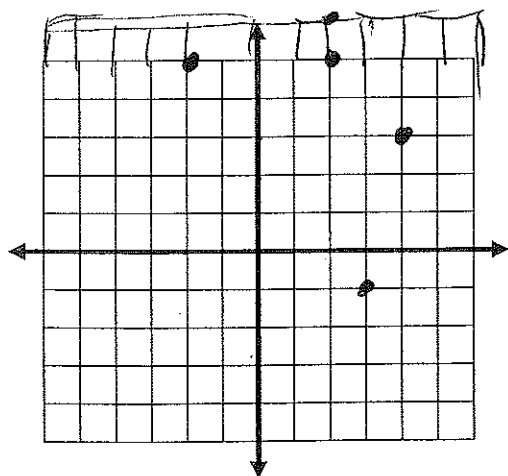


Table of Values

| x | f(x) |
|----|------|
| -2 | 5 |
| 2 | 5 |
| 2 | 6 |
| 3 | -1 |
| 4 | 3 |

Ordered Pairs

- $(-2, 5)$
- $(4, 3)$
- $(2, 5)$
- $(3, -1)$
- $(2, 6)$

Example 4

Create your own function

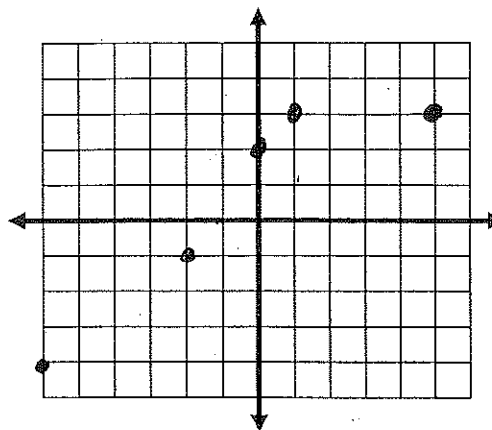


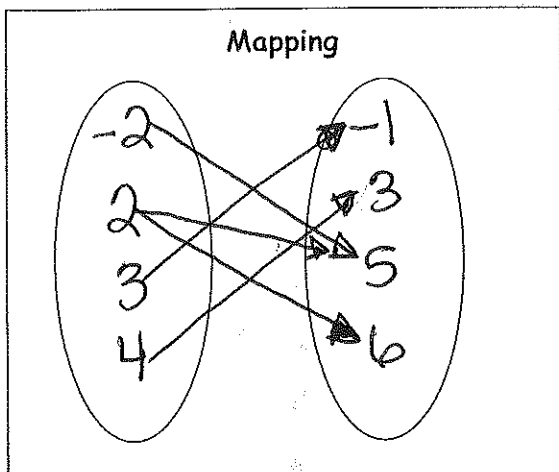
Table of Values

| x | f(x) |
|----|------|
| -6 | -4 |
| -2 | -1 |
| 0 | 2 |
| 1 | 3 |
| 5 | 3 |

Ordered Pairs

- $(-6, -4)$
- $(-2, -1)$
- $(0, 2)$
- $(1, 3)$
- $(5, 3)$

Mapping



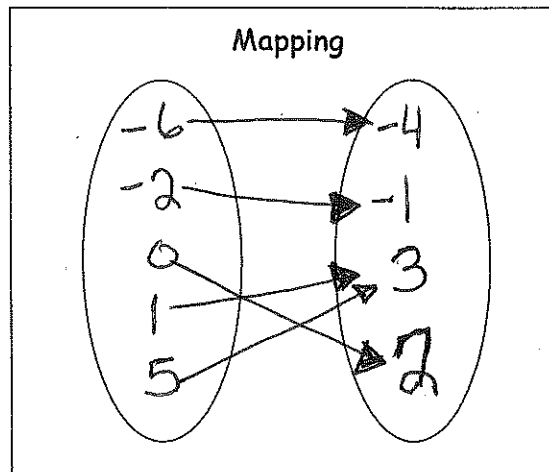
Domain $\{-2, 2, 3, 4\}$

Range $\{-1, 3, 5, 6\}$

Function? Yes No

Justify. Two arrows from the x-value of 2

Mapping



Domain $\{-6, -2, 0, 1, 5\}$

Range $\{-4, -1, 2, 3\}$

Function? Yes No

Justify. Passes the Vertical Line test