Candle Center - Infinite Algebra 1   Name_____

Discrete Relations

Date_____ Period_____

Each set of ordered pairs represents a relation. Represent the relation as a table.
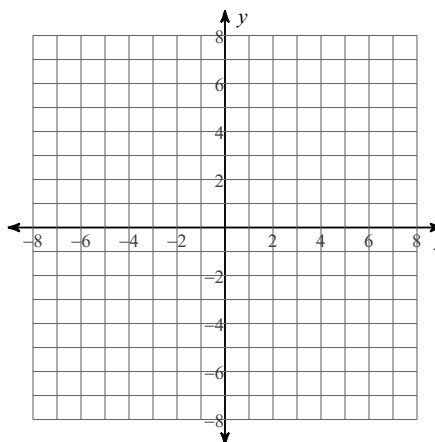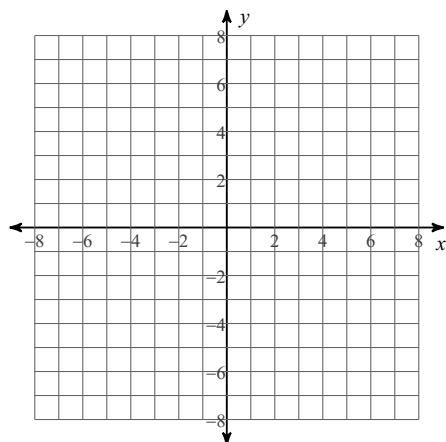
1) {(−7, 1), (−3, 0), (−2, −1), (4, 7), (6, 4)}   2) {(−1, −2), (0, −3), (0, 2), (6, −2), (7, −7)}

Each set of ordered pairs represents a relation. Represent the relation as a graph.

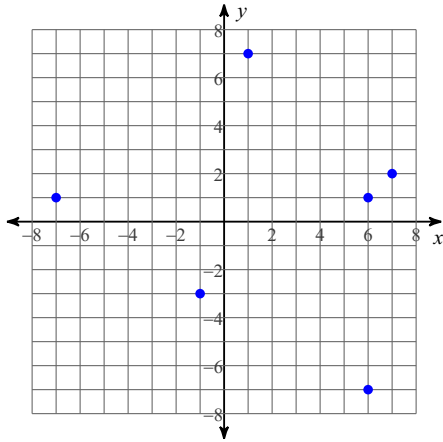3) {(−3, −6), (−1, 6), (0, 4), (5, 3), (7, 1)}   4) {(−2, 7), (0, 1), (3, −7), (7, −2), (7, 0)}

Each set of ordered pairs represents a relation. Represent the relation as a mapping diagram.
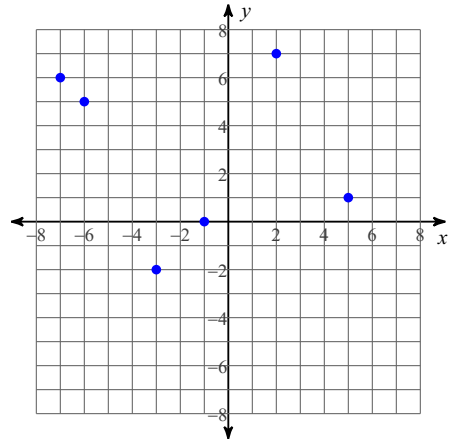
5) {(−6, −7), (−6, 3), (0, −7), (3, −4), (5, 6)}   6) {(−6, 7), (−5, 6), (3, 5), (3, −4), (6, 4)}

Each graph represents a relation. Represent the relation as a table, a set of ordered pairs, and a mapping diagram. Then determine the domain/range and if the relation is a function.

7)

8)

Name_____

Discrete Relations

Date_____ Period_____

Each set of ordered pairs represents a relation. Represent the relation as a table.
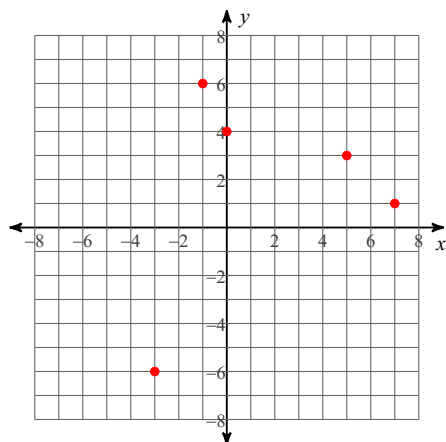
1) {(−7, 1), (−3, 0), (−2, −1), (4, 7), (6, 4)}

x	y
−7	1
−3	0
−2	−1
4	7
6	4

2) {(−1, −2), (0, −3), (0, 2), (6, −2), (7, −7)}
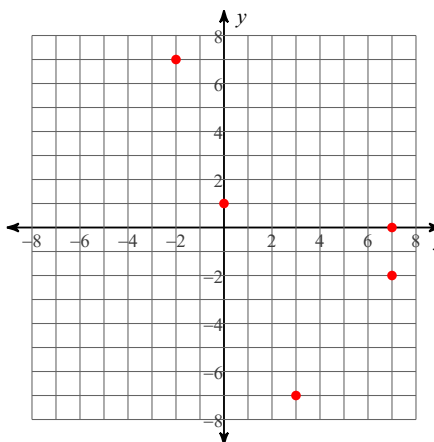
x	y
−1	−2
0	−3
0	2
6	−2
7	−7

Each set of ordered pairs represents a relation. Represent the relation as a graph.
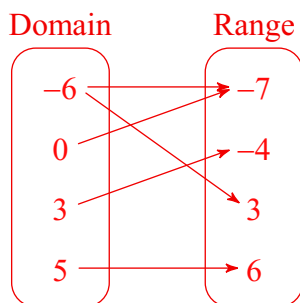
3) {(−3, −6), (−1, 6), (0, 4), (5, 3), (7, 1)}
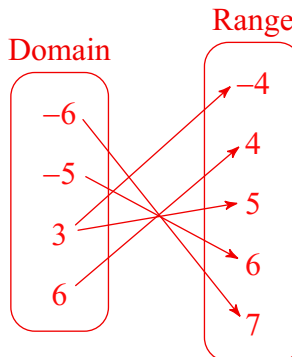

4) {(−2, 7), (0, 1), (3, −7), (7, −2), (7, 0)}

Each set of ordered pairs represents a relation. Represent the relation as a mapping diagram.
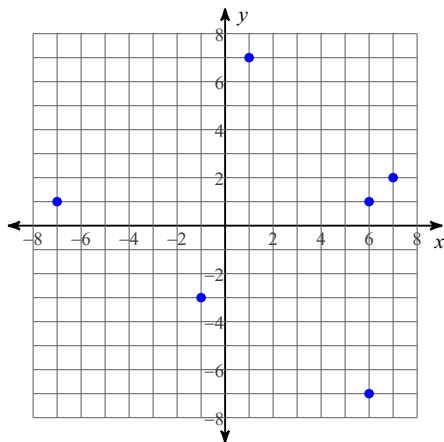
5) {(−6, −7), (−6, 3), (0, −7), (3, −4), (5, 6)}

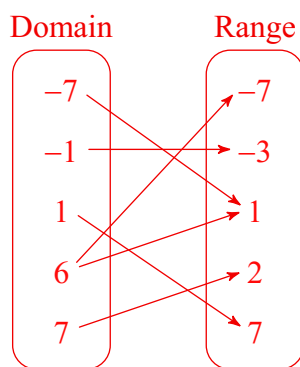6) {(−6, 7), (−5, 6), (3, 5), (3, −4), (6, 4)}

Each graph represents a relation. Represent the relation as a table, a set of ordered pairs, and a mapping diagram. Then determine the domain/range and if the relation is a function.

7)

x	−7	−1	1	6	6	7
y	1	−3	7	1	−7	2

Domain   Range
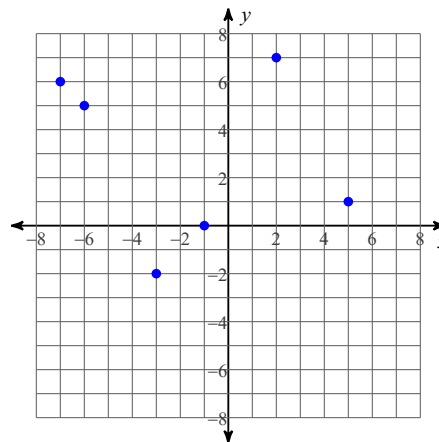

{(−7, 1), (−1, −3), (1, 7), (6, 1), (6, −7), (7, 2)}
Domain: {−7, −1, 1, 6, 7}
Range: {−7, −3, 1, 2, 7}
The relation is not a function.

8)

x	−7	−6	−3	−1	2	5
y	6	5	−2	0	7	1

Domain   Range

{(−7, 6), (−6, 5), (−3, −2), (−1, 0), (2, 7), (5, 1)}
Domain: {−7, −6, −3, −1, 2, 5}
Range: {−2, 0, 1, 5, 6, 7}
The relation is a function.