Name _____ Date _____ Class _____

LESSON 4-2

Review for Mastery

Relations and Functions

A **relation** is a set of ordered pairs. The relation can be in the form of a table, graph, or mapping diagram. The **domain** is all the *x*-values. The **range** is all the *y*-values.

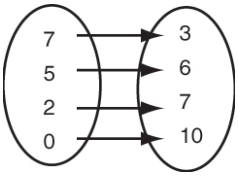
Find the domain and range.

x	3	4	5	6
y	1	2	2	3

D: {3, 4, 5, 6}; R: {1, 2, 3}

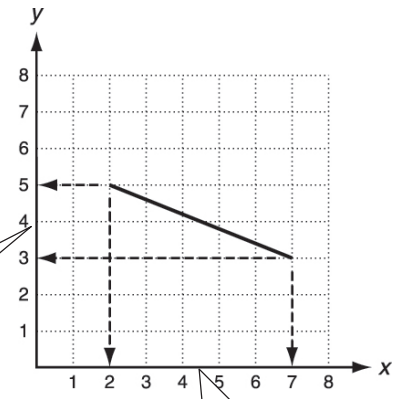
Do not list 2 twice in the range.

Find the domain and range.



D: {7, 5, 2, 0}; R: {3, 6, 7, 10}

Find the domain and range.



range: from 3 to 5

domain: from 2 to 7

D: $2 \le x \le 7$
R: $3 \le y \le 5$

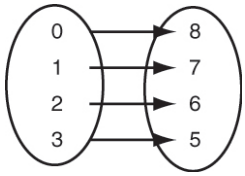
Find the domain and range of each relation.

1.

x	–2	–1	0	1
y	4	1	0	4

2. (4, 5) (–2, 6) (–5, 12)

3.



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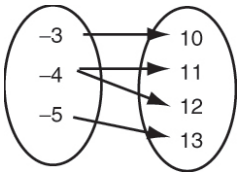

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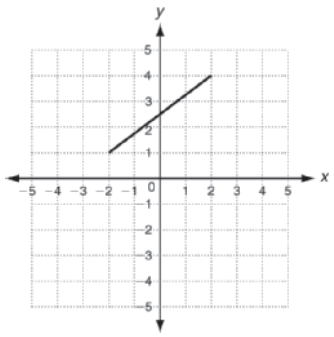

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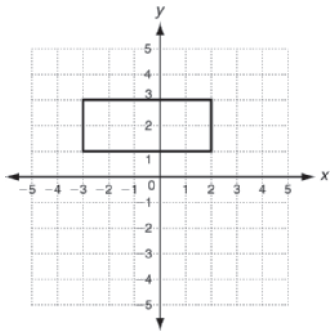


Name _____ Date _____ Class _____

LESSON 4-2

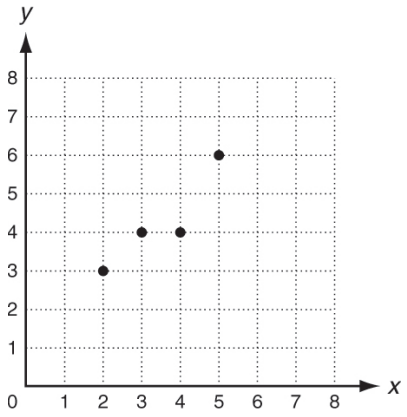
Review for Mastery

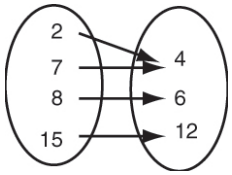
Relations and Functions continued

A **function** is a type of relation where each *x* value (domain) can be paired with only one *y* value (range).

Functions

x	2	3	4	5
y	3	4	4	6

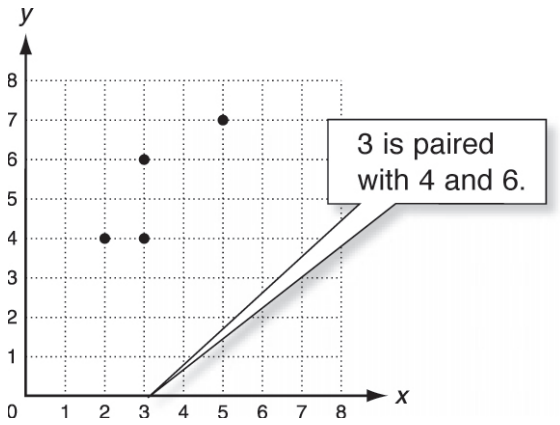


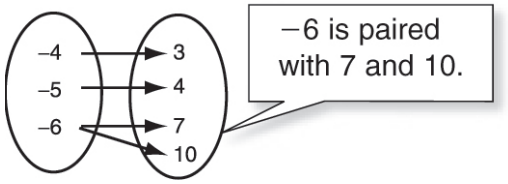


Not functions

6 is paired with 2 and 3.

x	5	6	6	7
y	1	2	3	4





Tell whether the relation is a function. Explain.

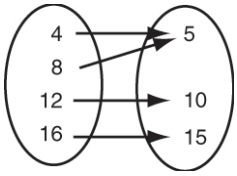
7.

x	–2	–3	–3	–4
y	1	2	3	4

_____

_____

8.



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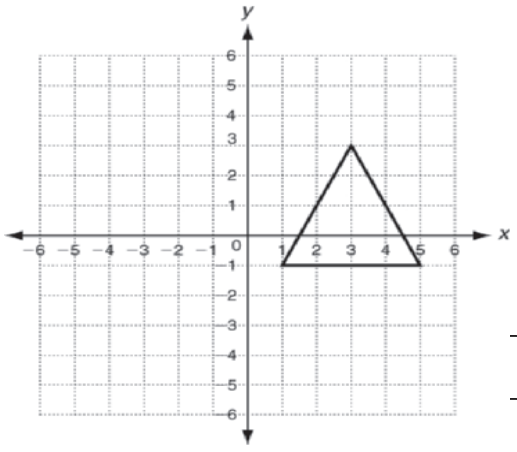
9.



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