

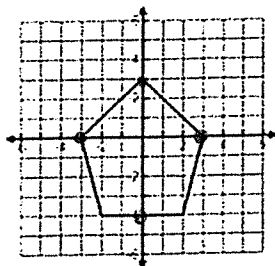
Name: Key Hour: _____ Date: _____

Domain and Range Practice I

Do the following for each relation:

- State the domain and range in interval notation
- Determine if the relation represents a function
- Explain your reasoning using the words "domain" and "range" or x and y

1)



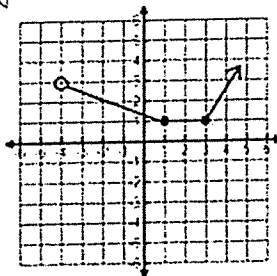
Domain: $[-3, 3]$

Range: $[-4, 3]$

Function? *No*

Explanation: *Most x's have 2 y's*

2)



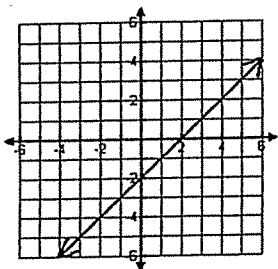
Domain: $(-4, \infty)$

Range: $[1, \infty)$

Function? *Yes*

Explanation: *Each x has exactly 1 y*

3)



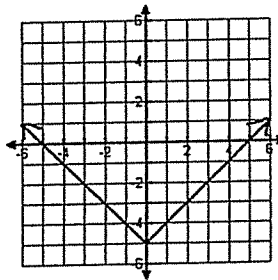
Domain: $(-\infty, \infty)$

Range: $(-\infty, \infty)$

Function? *Yes*

Explanation: *Each x has exactly 1 y*

4)



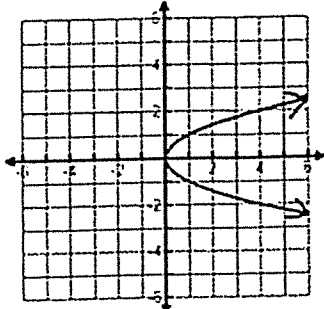
Domain: $(-\infty, \infty)$

Range: $[-5, \infty)$

Function? *Yes*

Explanation: *Each x has 1 y exactly*

5)



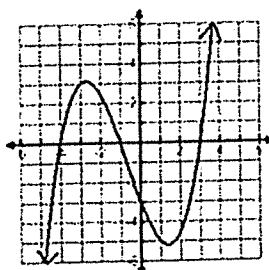
Domain: $[0, \infty)$

Range: $(-\infty, \infty)$

Function? *No*

Explanation: *Most x's have 2 y's*

6)



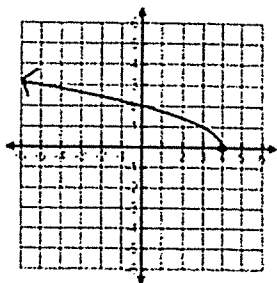
Domain: $(-\infty, \infty)$

Range: $(-\infty, \infty)$

Function? *Yes*

Explanation: *Each x has exactly 1 y*

7)

Domain: $(-\infty, 4]$ Range: $[0, \infty)$

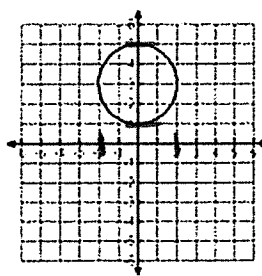
Function?

yes

Explanation:

Each x has exactly 1 y

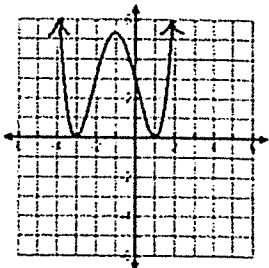
8)

Domain: $[-2, 2]$ Range: $[1, 5]$

Function? No

Explanation: Most x 's have 2 y 's

9)

Domain: $(-\infty, \infty)$ Range: $[0, \infty)$

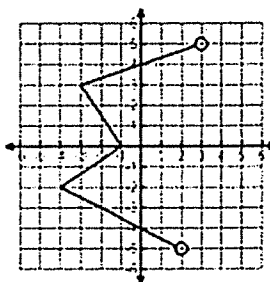
Function?

yes

Explanation:

Each x has exactly 1 y

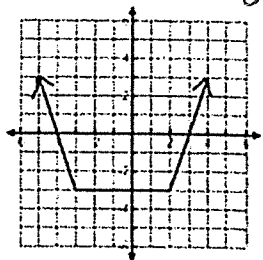
10)

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

Function? No

Explanation: Most x 's have multiple y 's

11)

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

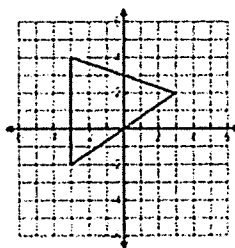
Function?

yes

Explanation:

Each x has exactly 1 y

12)

Domain: $[-3, 3]$ Range: $[-2, 4]$

Function? No

Explanation: Most x 's have more than 1 y 13) Sketch a function that has a domain of $[-3, 5)$ and a range of $[-4, 2)$.

The shape between
the 2 points
can vary, but
must be a function!

