NOTES : Functions – Domain & Range

Points : { 1, 2, 3, 4 }

Intervals:
(does not include endpt
[does include endpt

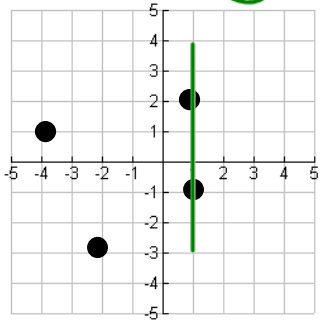
How to read domain and range from a graph:

Domain: input, x-values, indep. variable values

Range: output, y-values, dep. var. values

In each of the following graphs, a) tell whether or not each graph is a function and, b) identify the domain and range of each relation.

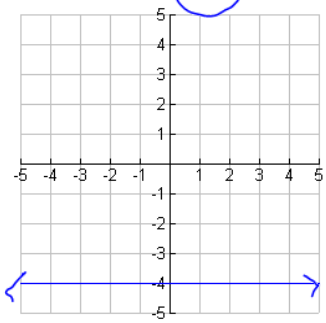
1. Function? Yes (No)



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

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

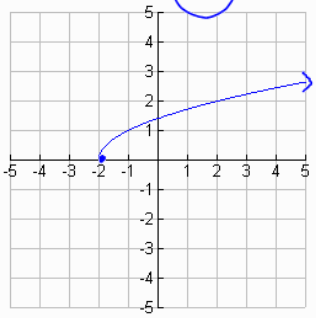
2. Function? (Yes) No



Domain $(-\infty, \infty)$ (all real numbers)

Range $\{-4\}$

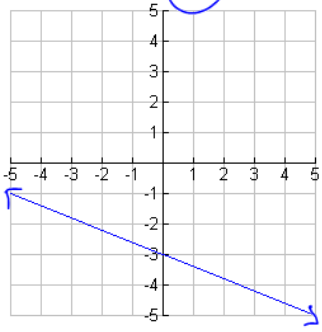
3. Function? (Yes) No



Domain $[-2, \infty)$

Range $[0, \infty)$

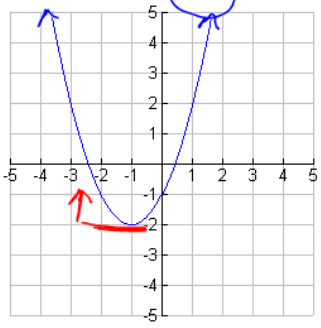
4. Function? (Yes) No



Domain $(-\infty, \infty)$

Range $(-\infty, \infty)$

5. Function? (Yes) No



Domain $(-\infty, \infty)$

Range $[-2, \infty)$

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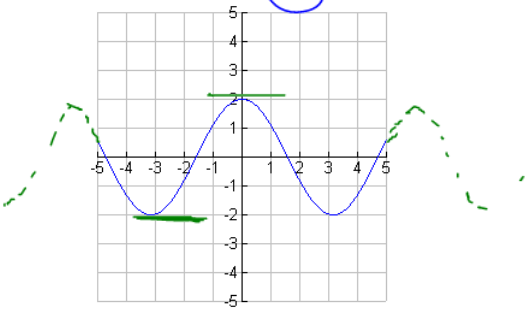
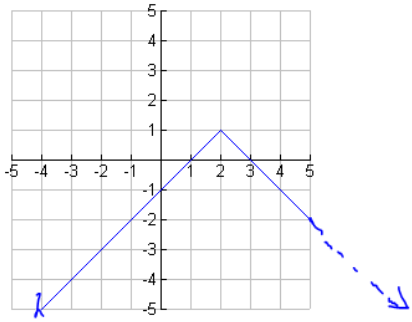
6. Function? (Yes) No



Domain $(-\infty, \infty)$

Range $[-2, 2]$

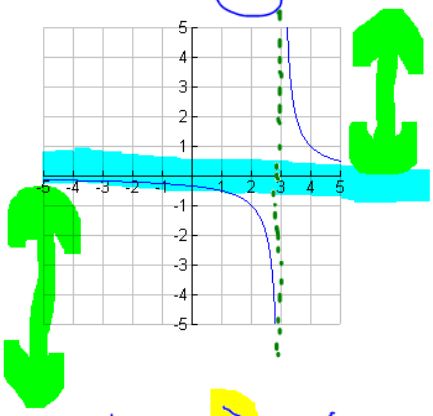
7. Function? (Yes) No



Domain $(-\infty, \infty)$

Range $(-\infty, 1]$

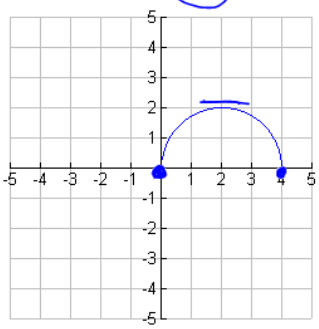
8. Function? (Yes) No



Domain $(-\infty, 3) \cup (3, \infty)$

Range $(-\infty, 0) \cup (0, \infty)$

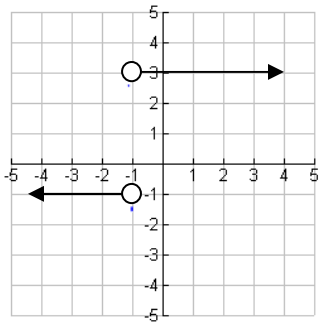
9. Function? (Yes) No



Domain $[0, 4]$

Range $[0, 2]$

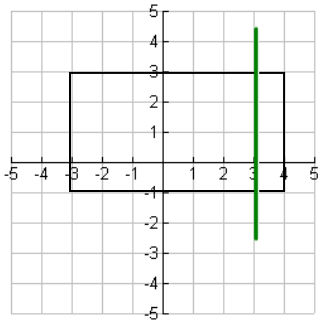
10. Function? (Yes) No



Domain $(-\infty, -1) \cup (-1, \infty)$

Range $\{-1, 3\}$

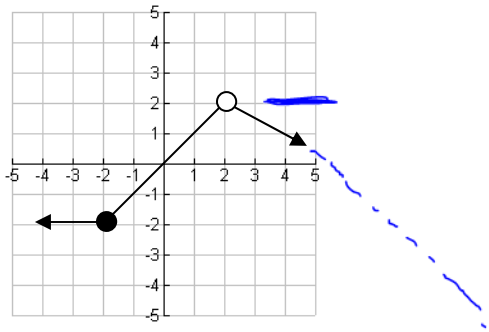
11. Function? Yes (No)



Domain $[-3, 4]$

Range $[-1, 3]$

12. Function? (Yes) No



Domain $(-\infty, 2) \cup (2, \infty)$

Range $(-\infty, 2)$