Name: _____ **Class:** _____ **Date:** _____ **ID: A**

Lesson #8 E: Understanding and Graphing Basic Functions and Domain and Range of a Function (Reference: Lesson #25, #30, #115 & #119 in book)

Problem

1. **Please graph each of the following functions $f(x)$.**

   1. $f(x) = x^2$

   2. $f(x) = 2x^2 - 2$

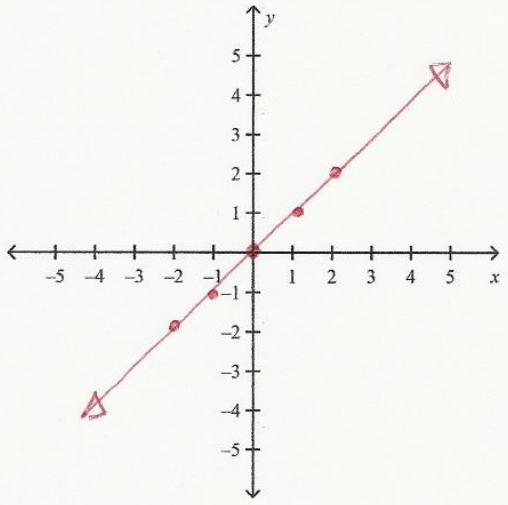
   3. $f(x) = x^3$

   4. $f(x) = \sqrt{x}$

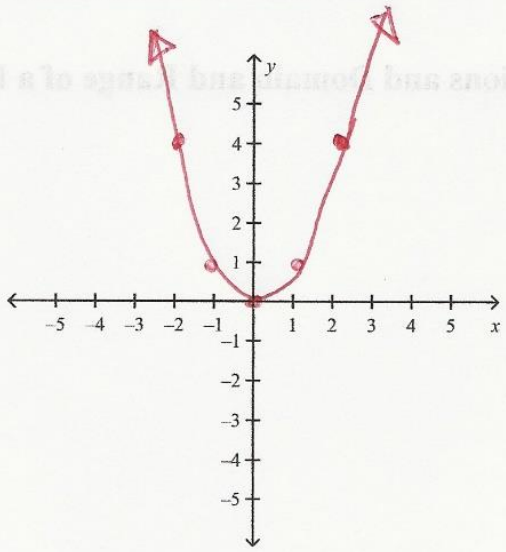
   5. $f(x) = |x|$

   6. **For each of the following graphs, please state the domain and range of the function.**

6.



7.


y
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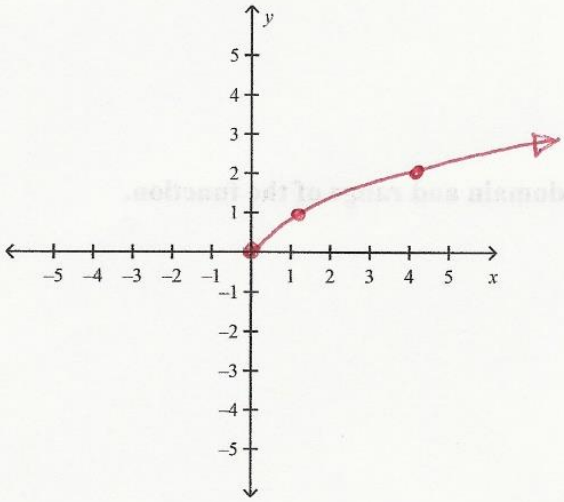
8.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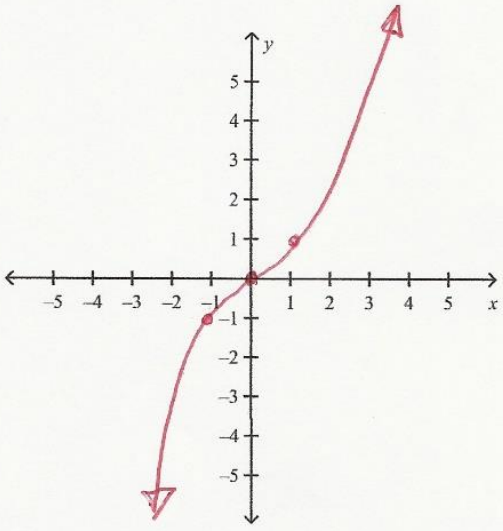
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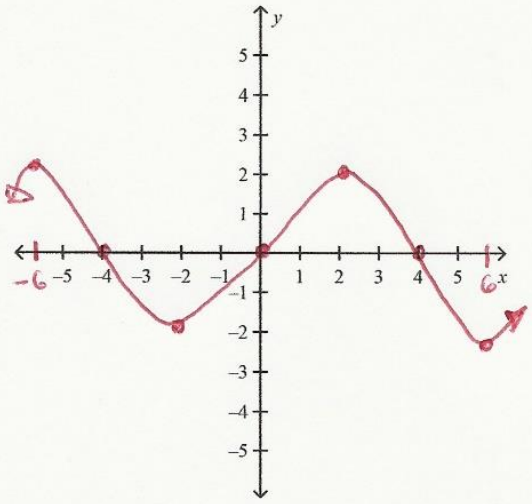
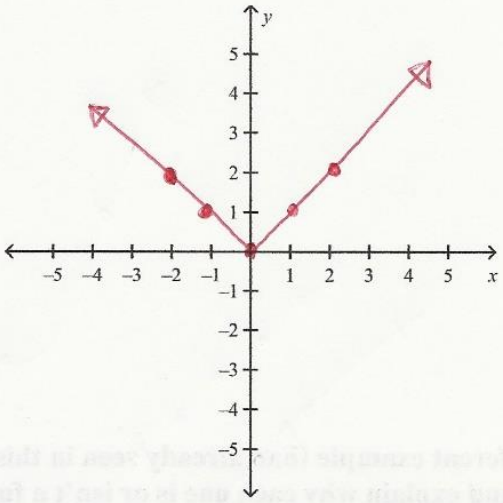
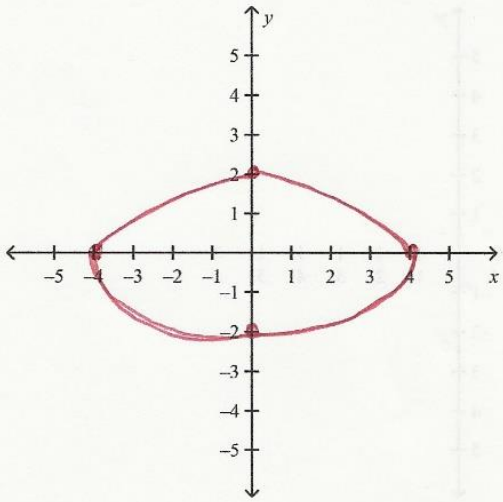


10.

11. **For each of the following graphs state whether it is a function or not a function and give an explanation to why you arrived at that answer.**

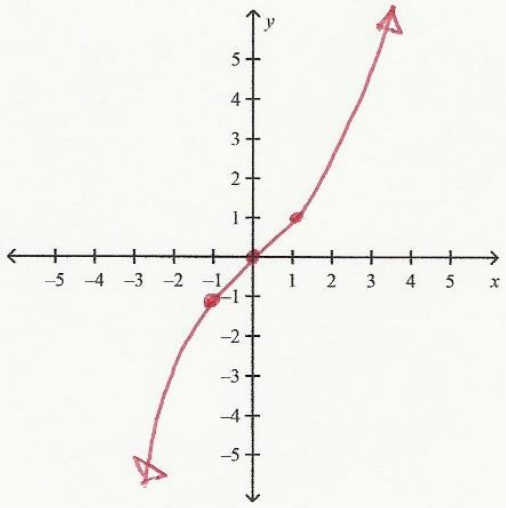


11.

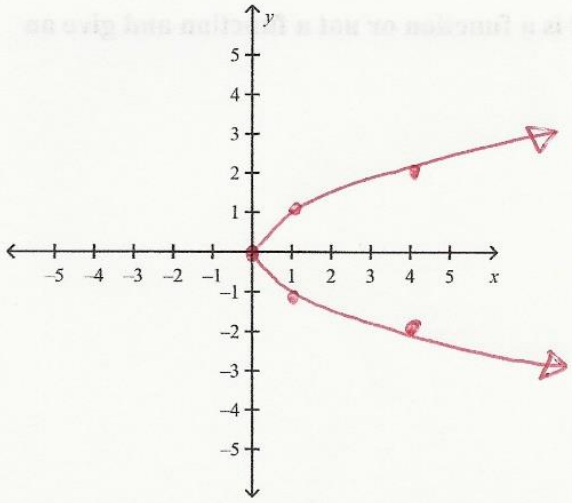


12.

13.



14.



15. **For the following questions please give me a different example than already seen in this assignment, of a graph that is a function and is not a function and explain why each one is or isn't a function.**