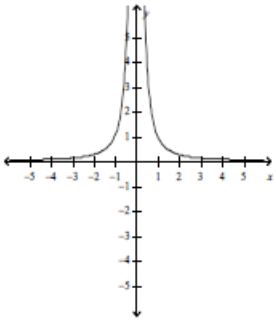
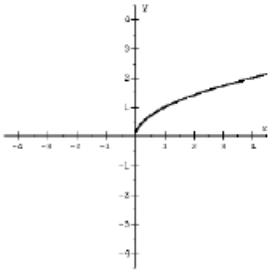
1-5: Parent Functions and Transformations Homework

1. Identify the parent functions:

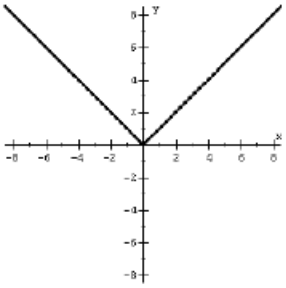
a.



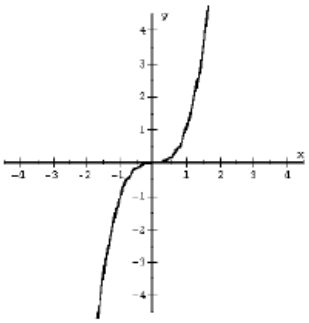
b.



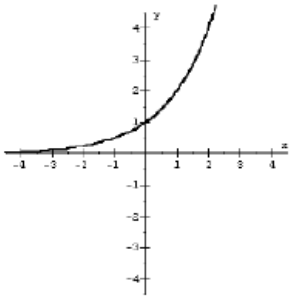
c.



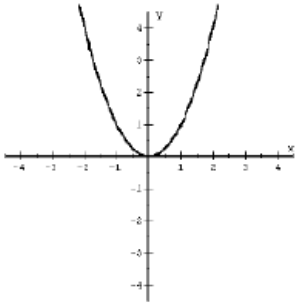
d.



e.



f.



2. For the following functions, name the parent function and describe the domain, range, symmetry, and whether the function is even, odd, or neither.

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

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

c. $f(x)=\frac{1}{x}$

3. Identify the parent function of each:

a. $g(x) = -5\lfloor x-2 \rfloor$ b. $g(x) = \dfrac{\sqrt{x+3}}{4}$ c. $g(x) = \dfrac{4}{x+1}$

4. Using your graphing calculator, describe the asymptotes and point of discontinuity of the graph of the function

$$f(x) = \frac{1}{x^2 - 3x - 4}$$