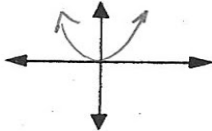


Calculus  
Parent Function Review

Name \_\_\_\_\_

**Quickly** sketch the following parent functions on the axes provided and list the domain and range of each function. Spend no more than 1 minute on each.

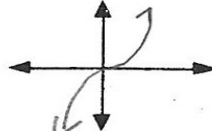
1.  $y = x^2$



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

Range:  $[0, \infty)$

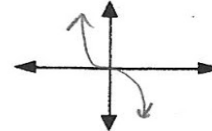
2.  $y = a \cdot x^3, a > 0$



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

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

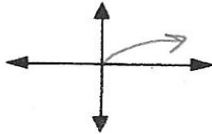
3.  $y = a \cdot x^3, a < 0$



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

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

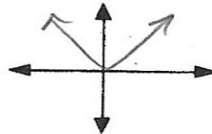
4.  $y = \sqrt{x}$



Domain:  $[0, \infty)$

Range:  $[0, \infty)$

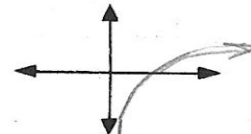
5.  $y = |x|$



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

Range:  $[0, \infty)$

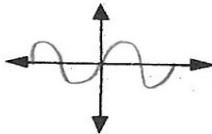
6.  $y = \ln(x)$



Domain:  $(0, \infty)$

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

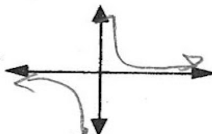
7.  $y = \sin(x)$



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

Range:  $[-1, 1]$

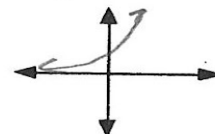
8.  $y = 1/x$



Domain:  $(-\infty, 0) \cup (0, \infty)$

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

9.  $y = e^x$



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

Range:  $(0, \infty)$

(over)