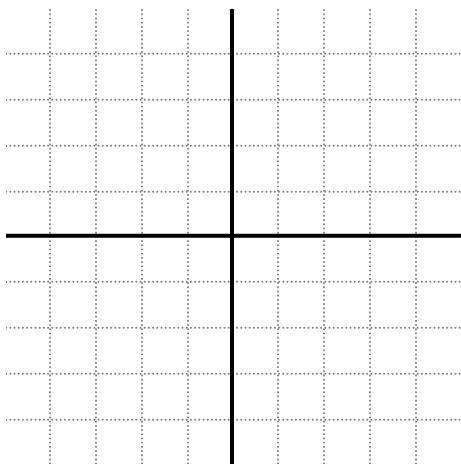


Homework 10 – Graphs of Parent Functions  
September 21, 2011 - Precalculus (Oberle)

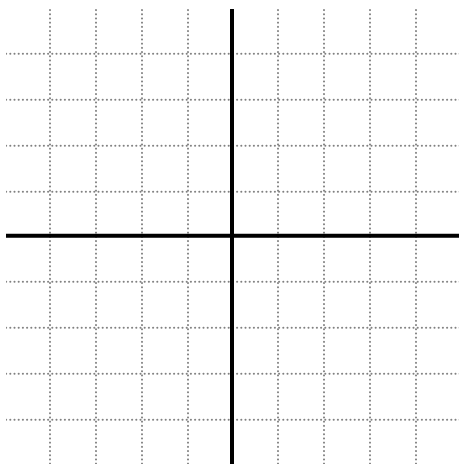
Accurately graph the following functions, indicating the domain, range, and any other special characteristics (such as symmetry). You should change the scale on your graph when needed to show the graph.



$$y = 3$$

Domain:

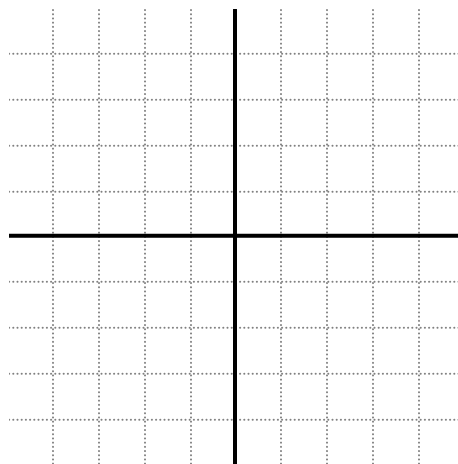
Range:



$$y = x$$

Domain:

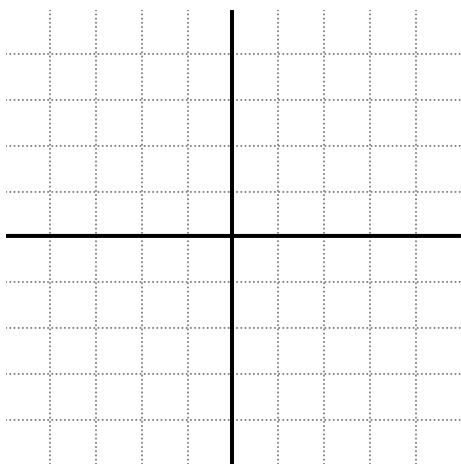
Range:



$$y = x^2$$

Domain:

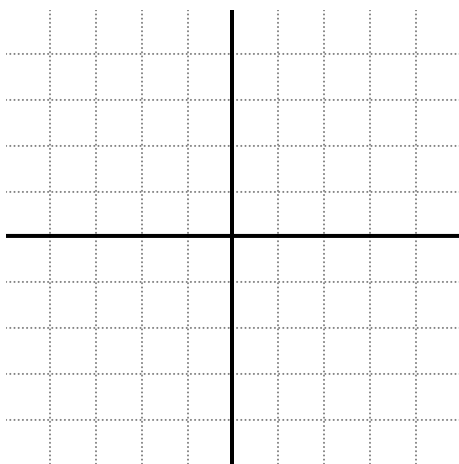
Range:



$$y = x^3$$

Domain:

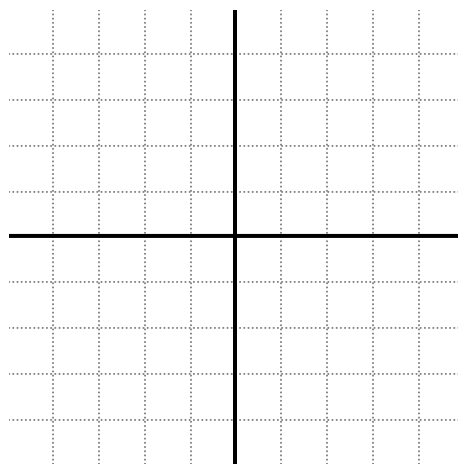
Range:



$$y = x^4$$

Domain:

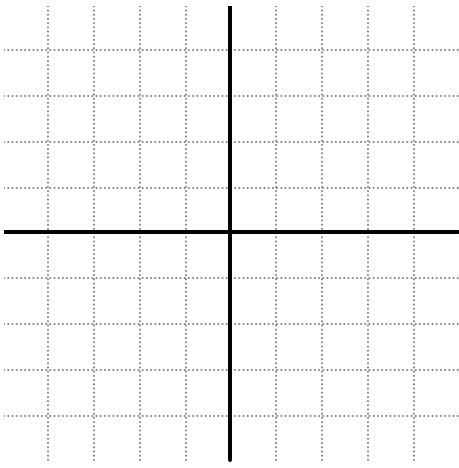
Range:



$$y = x^5$$

Domain:

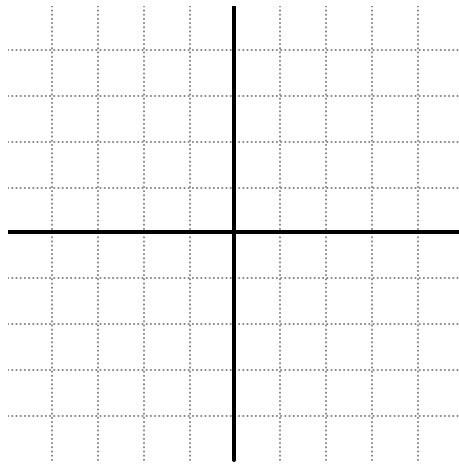
Range:



$$y = x^n, \text{ where } n \text{ is odd}$$

Domain:

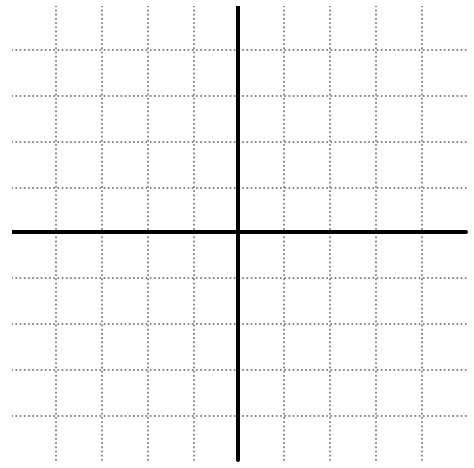
Range:



$$y = x^n, \text{ where } n \text{ is even}$$

Domain:

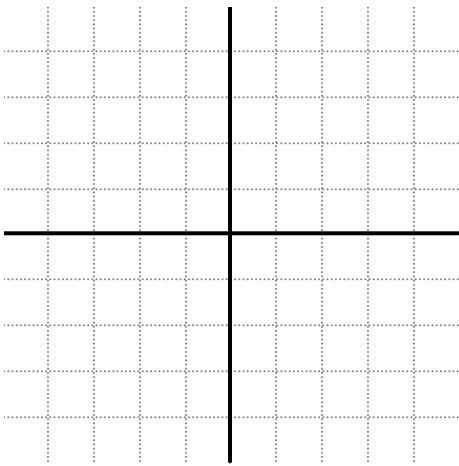
Range:



$$y = |x|$$

Domain:

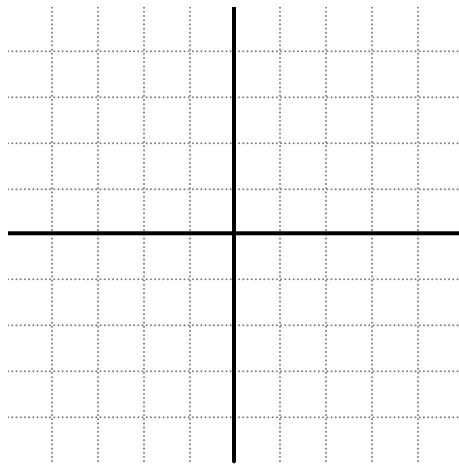
Range:



$$y = [x] \text{ (greatest integer)}$$

Domain:

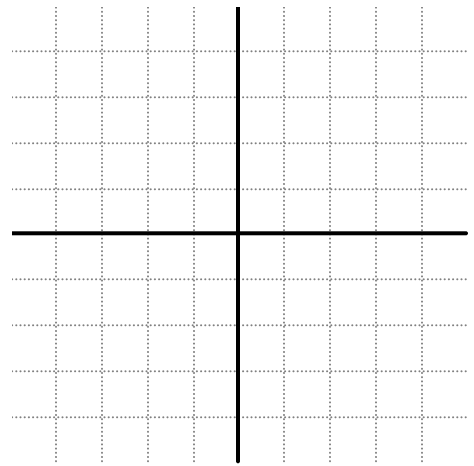
Range:



$$y = \frac{1}{x}$$

Domain:

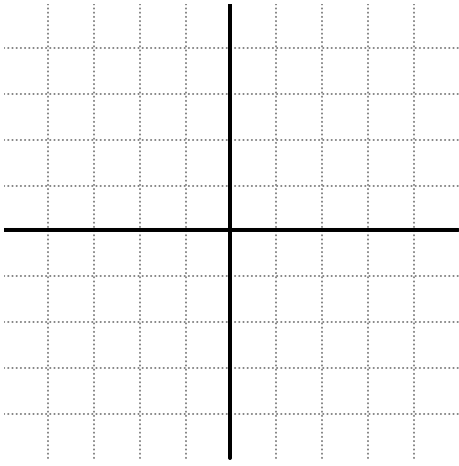
Range:



$$y = \frac{1}{x^2}$$

Domain:

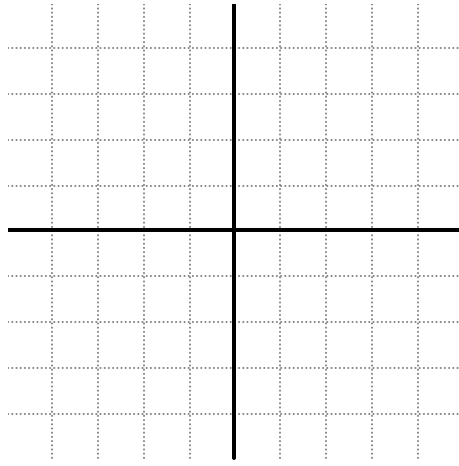
Range:



$$y = \sqrt{x}$$

Domain:

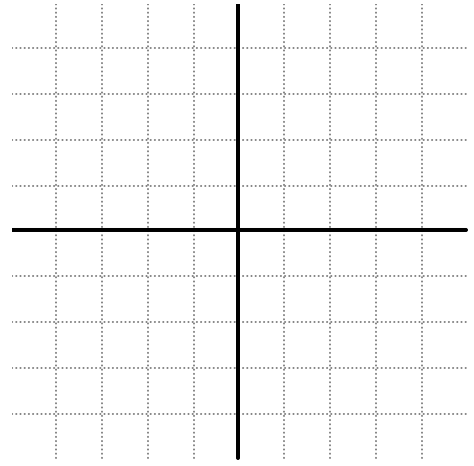
Range:



$$y = \sqrt[3]{x}$$

Domain:

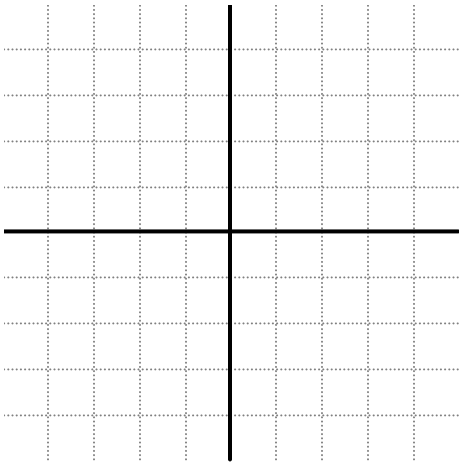
Range:



$$y = 2^x$$

Domain:

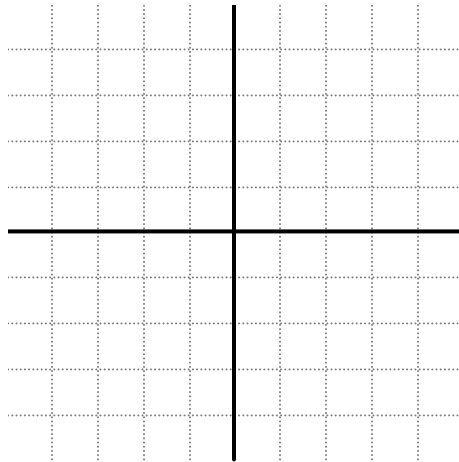
Range:



$$y = 3^x$$

Domain:

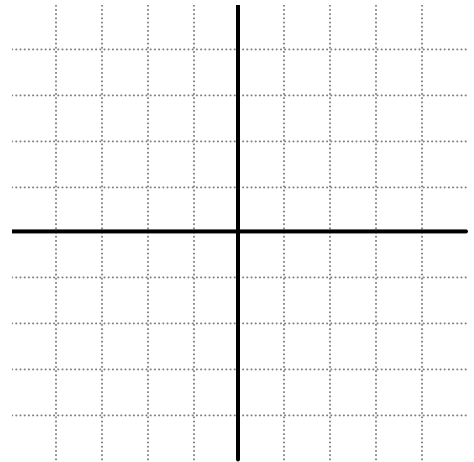
Range:



$$y = e^x$$

Domain:

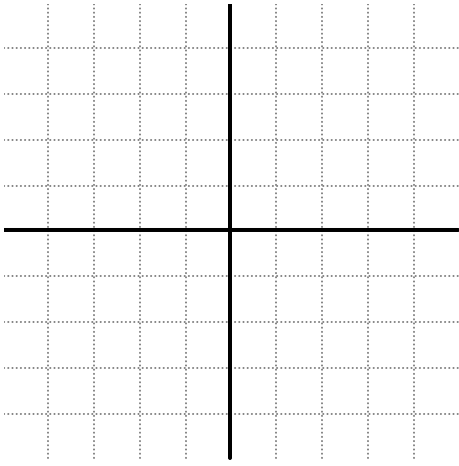
Range:



$$y = \left(\frac{1}{2}\right)^x$$

Domain:

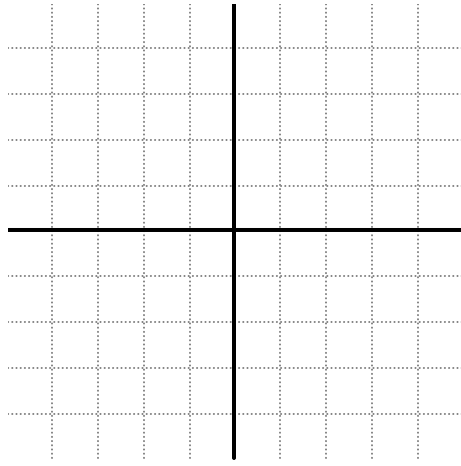
Range:



$$y = \log_2 x$$

Domain:

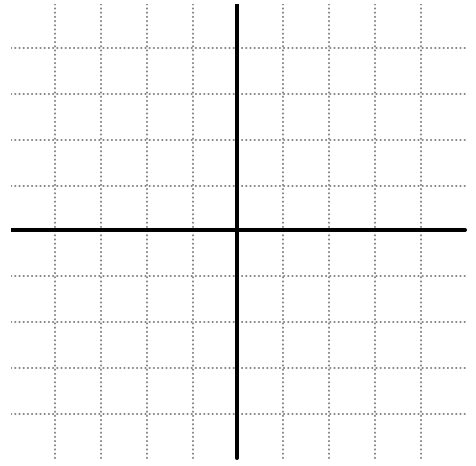
Range:



$$y = \log_3 x$$

Domain:

Range:



$$y = \ln x$$

Domain:

Range: