## Quiz 3

Show all your work. Reasonable supporting work must be shown for any partial credit. There are two sides to this quiz.

1. The function $g$ is a logarithmic function graphed below. The logarithmic graph has been shifted horizontally.
(a) [2] (WebHW9 \#2)

Does $g$ have an inverse?
Why or why not?
(b) [2] (WebHW10 \#19)

Find the equation for $g$.

2. [3] (WebHW9 \#22) Simplify $\frac{x^{3} \sqrt{y}}{x^{-1} y}$
3. Let $f$ be the graph given below:

- [1] (InverseActivity \#2)

What is the range of $f$.

- [2] (§1.7 \#50) Sketch the graph of $f^{-1}$.


