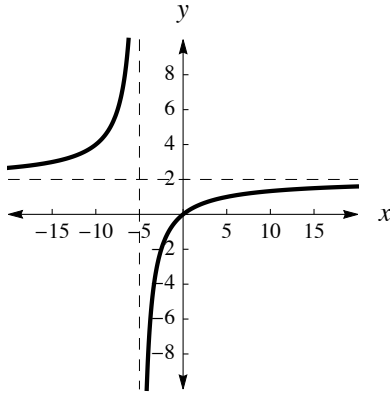


Quiz 2: Version D

First & Last Name: _____ Class: _____

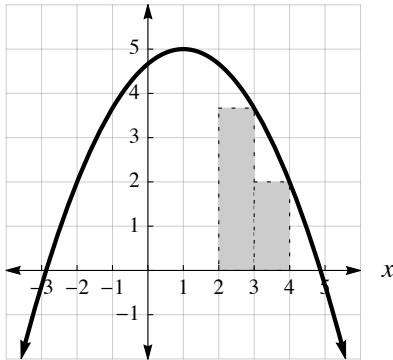
1. Write all the *approach statements* for the following function.



2. Sketch the graph of a function that has one *vertical asymptote* and a *domain*: $x > 2$ and $x \neq 4$.

3. Approximate the area between the parabola (shown below) and the x -axis for $-2 \leq x \leq 4$ using *right-hand rectangles* with widths of 1. Two rectangles have been drawn for you.

$$f(x) = -\frac{1}{3}(x - 1)^2 + 5$$



Challenge (required for Honors)

4. Simplify $f(x) = \frac{x^2 - 2x - 16}{x + 5}$

5. Where does $f(x)$ in the previous question have a hole or asymptote? Is it a hole or an asymptote? Explain.