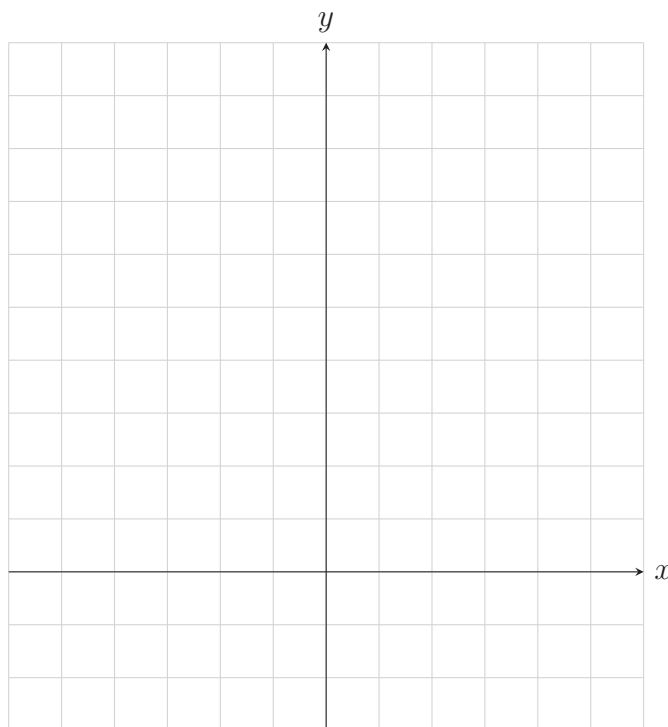


Math 111 LP 3 - Piecewise Functions

1. A function f defined as

$$f(x) = \begin{cases} -3x - 6 & \text{if } x \leq -3 \\ 3 & \text{if } -3 < x < 2 \\ \left(\frac{1}{3}x\right)^3 + 1 & \text{if } x > 2 \end{cases}$$

a. Graph $y = f(x)$.



b. Find $f(-3)$, $f(0)$, and $f(4)$.

d. Determine the domain and range of f .

c. Locate any intercepts.

e. Is f continuous on its domain?

2. The graph of a piecewise-defined function is given. Write a definition for the function.

