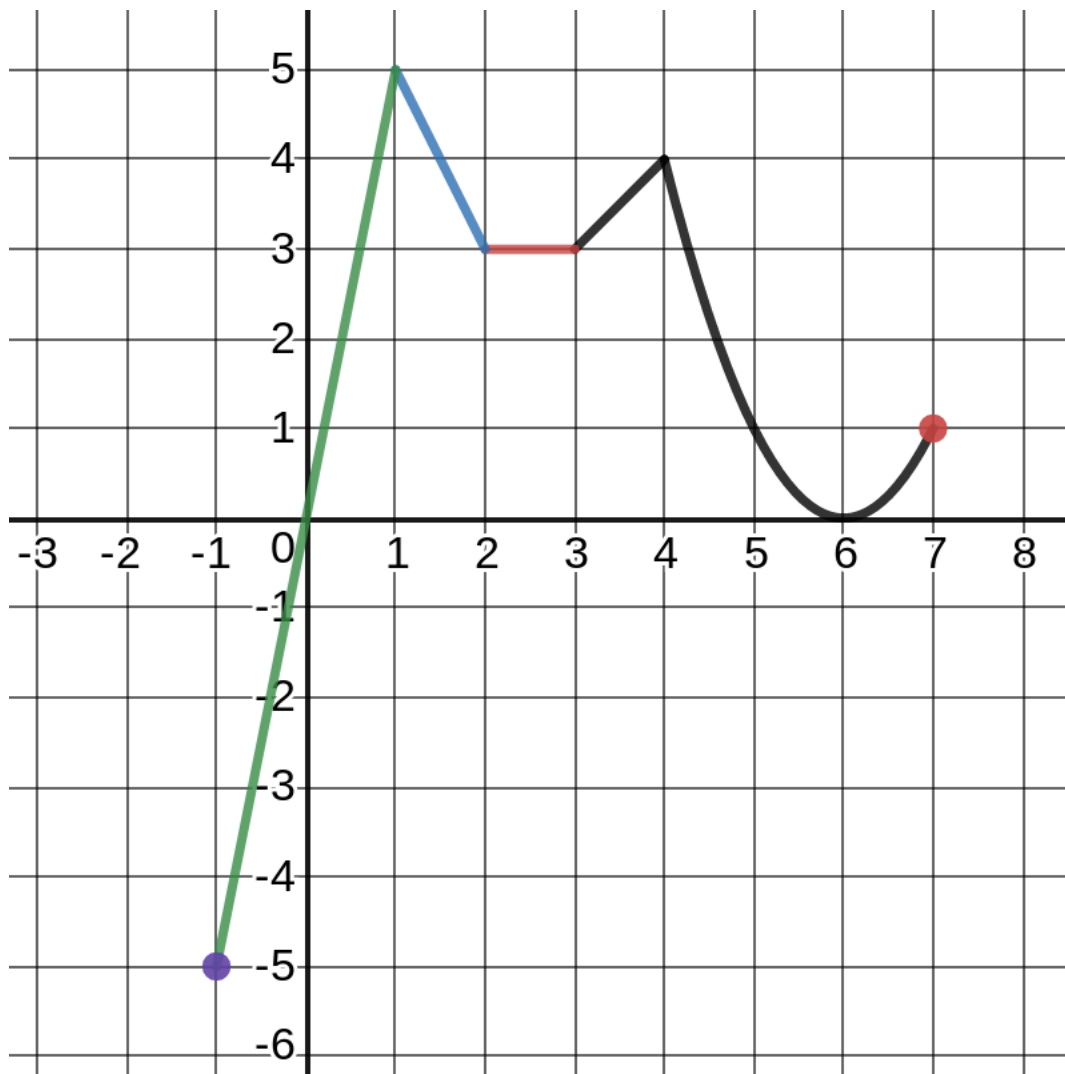


Name:

Section: 5 6

Here is a graph of the a function  $y = f(x)$ :



Is this function continuous on  $[-1, 7]$ ?

Determine the critical numbers for  $f(x)$ .

Determine all local minimum and maximum for  $f(x)$ .

Determine the absolute minimum and maximum for  $f(x)$ .

Find the critical numbers for the following functions:

$$f(x) = 2x^3 + x^2 + 2x$$

$$g(x) = \frac{\sqrt{x}}{1+x^2}$$

$$h(x) = x^{4/5}(x-2)^2$$

Find the absolute maximum and minimum values of the given function on the given interval.

$$f(x) = 12 + 4x - x^2, \text{ on } [0, 5].$$