

## Exercise 16

Sketch the graph of  $f$  by hand and use your sketch to find the absolute and local maximum and minimum values of  $f$ . (Use the graphs and transformations of Sections 1.2 and 1.3.)

$$f(x) = 2 - \frac{1}{3}x, \quad x \geq -2$$

### Solution

On the interval  $-2 \leq x < \infty$  there's only an absolute maximum:

$$f(-2) = 2 - \frac{1}{3}(-2) = \frac{8}{3} \approx 2.667.$$

This is illustrated in the graph of the function below.

