

## Exercise 48

For the following exercises, graph the given functions by hand.

$$f(x) = |2x - 4| - 3$$

### Solution

Rewrite the function to graph it more easily.

$$\begin{aligned} f(x) &= |2(x - 2)| - 3 \\ &= 2|x - 2| - 3 \end{aligned}$$

This way it's apparent the graph is shifted to the right by 2 units, shifted down by 3 units, and has a rise-over-run of 2.

