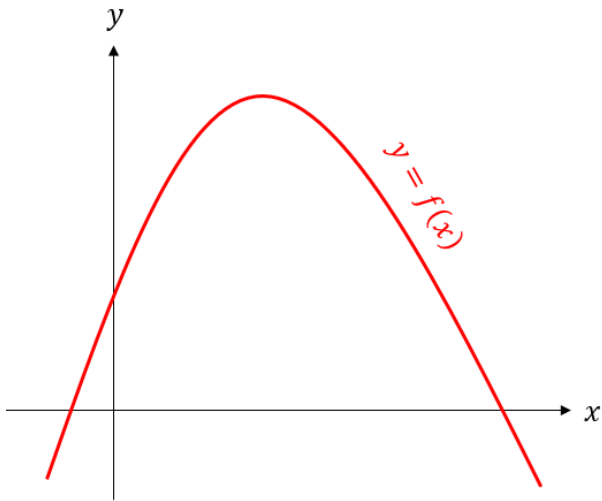


## 12.10) Sketching gradient functions

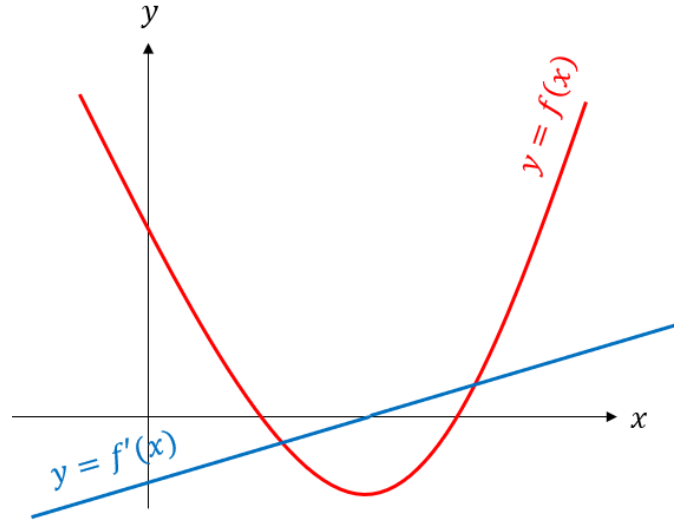
# Worked example

Sketch  $y = f'(x)$  on the same axes



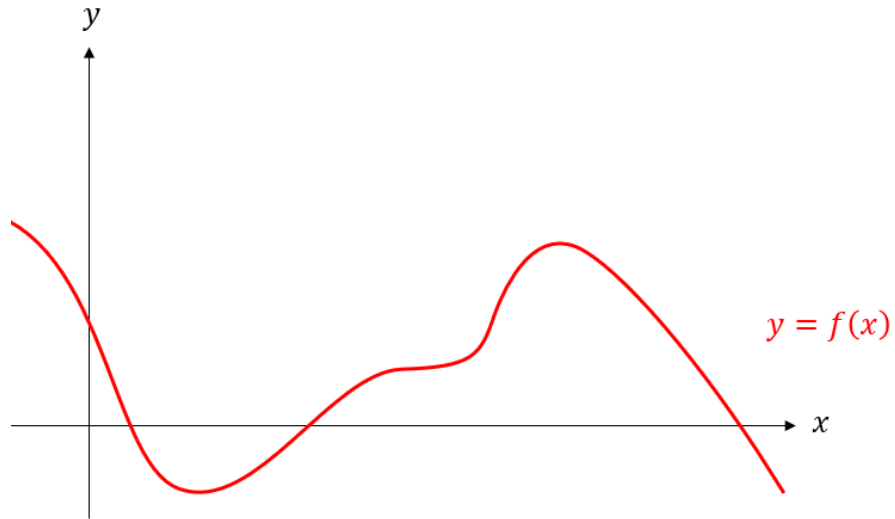
# Your turn

Sketch  $y = f'(x)$  on the same axes



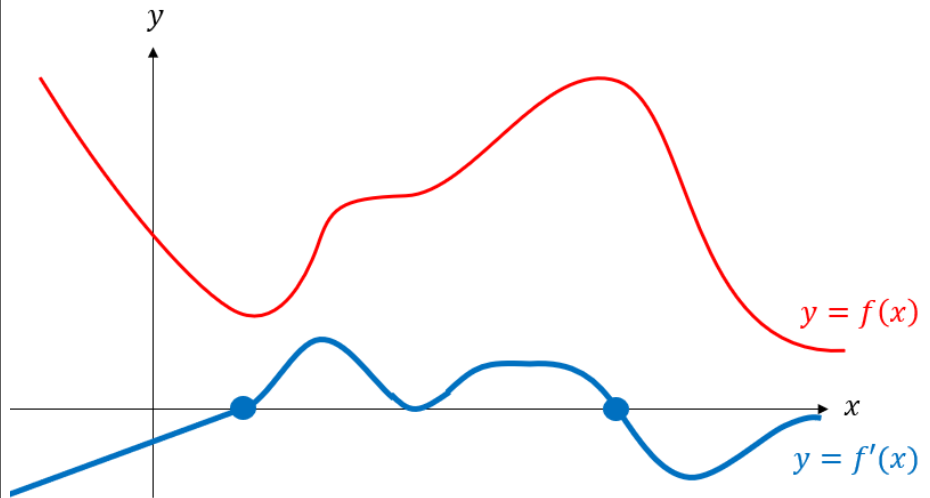
## Worked example

Sketch  $y = f'(x)$  on the same axes



## Your turn

Sketch  $y = f'(x)$  on the same axes



## Worked example

A negative cubic has the equation  $y = f(x)$ .

The curve has stationary points at  $(4, 1)$  and  $(-1, 0)$  and cuts the  $x$ -axis at  $(6, 0)$ .

Sketch the gradient function,  $y = f'(x)$ , showing the coordinates of any points where the curve cuts or meets the  $x$ -axis.

## Your turn

A positive cubic has the equation  $y = f(x)$ .

The curve has stationary points at  $(-1, 4)$  and  $(1, 0)$  and cuts the  $x$ -axis at  $(-3, 0)$ .

Sketch the gradient function,  $y = f'(x)$ , showing the coordinates of any points where the curve cuts or meets the  $x$ -axis.

