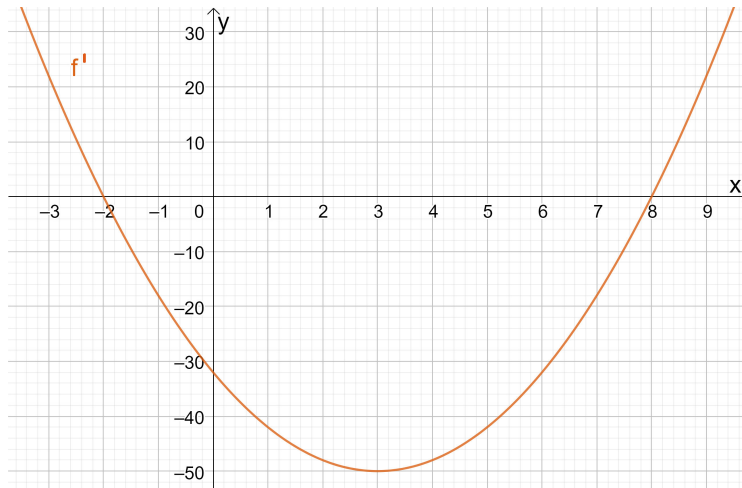


**Exercise 1**

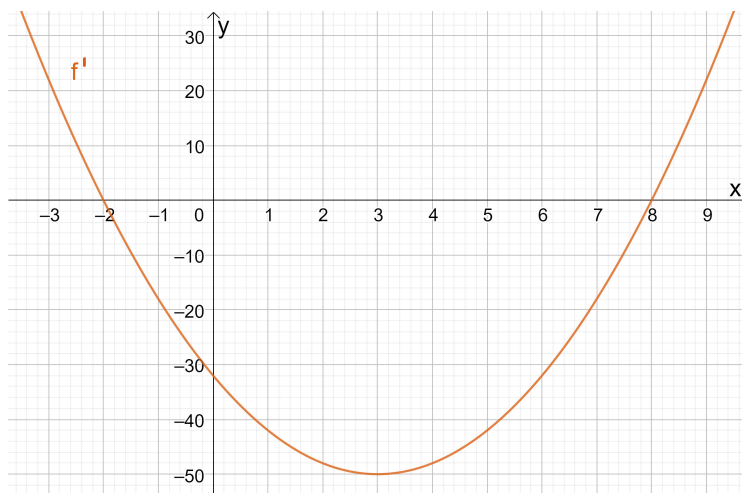
Calc. : ✗

Der Graph einer Ableitungsfunktion  $f'(x)$  ist gegeben.

- |   |         |
|---|---------|
| 1. Für welche Werte von $x$ ist $f(x)$ streng monoton steigend?                                       | 3 marks |
| 2. An welcher Stelle nimmt $f(x)$ ein Minimum an?   | 3 marks |
| 3. Welche Bedeutung hat der Punkt $(3   -50)$ des Graphen von $f'$ für den Graphen der Funktion $f$ ? | 3 marks |

**Exercise 2**

Calc. : ✗

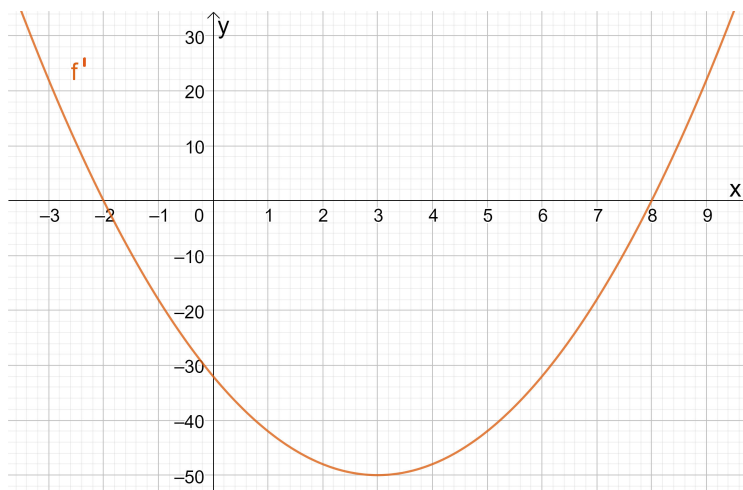
De grafiek van een afgeleide functie  $f'(x)$  is gegeven.

- |  |         |
|--|---------|
| 1. Voor welke waarden van $x$ is de grafiek van $f(x)$ stijgend?   | 3 marks |
| 2. Voor welke waarde van $x$ bereikt $f(x)$ een minimum?   | 3 marks |
| 3. Schets een mogelijke grafiek van $f(x)$ als je weet dat het punt $A(8, 0)$ op de grafiek van $f(x)$ ligt. | 3 marks |

**Exercise 3**

Calc. : ✖

The graph of the derivative  $f'(x)$  is given below.

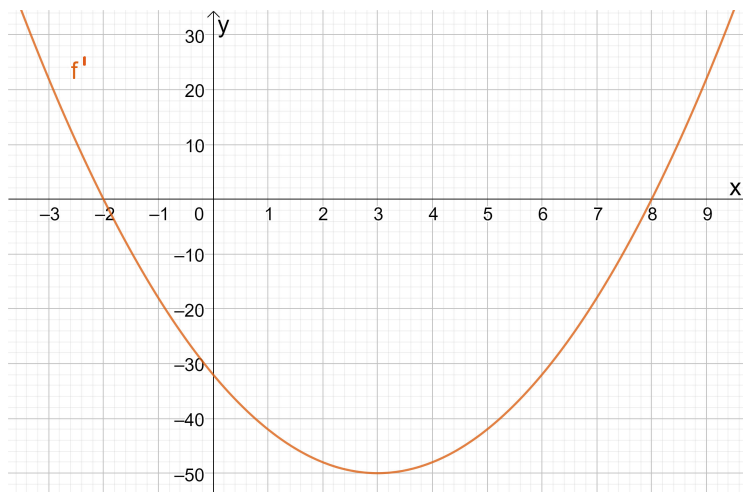


- |  |         |
|--|---------|
| 1. Give the $x$ -coordinates of the two turning points.  | 2 marks |
| 2. For which values of $x$ is the graph of $f(x)$ increasing?                                      | 2 marks |
| 3. For which value of $x$ does $f(x)$ reach a minimum?   | 2 marks |
| 4. Sketch a possible graph of $f(x)$ , given that the point $(8, 0)$ lies on the graph of $f(x)$ . | 3 marks |

**Exercise 4**

Calc. : ✖

La figura mostra il grafico della derivata  $f'(x)$  di una funzione  $f(x)$ .



- |  |         |
|--|---------|
| 1. Individua per quali valori di $x$ il grafico di $f(x)$ è crescente.   | 3 marks |
| 2. Per quale valore delle $x$ la funzione $f(x)$ raggiunge il suo minimo relativo?   | 3 marks |
| 3. Disegna un possibile grafico della funzione $f(x)$ sapendo che il punto $A(8, 0)$ appartiene anche al grafico di $f(x)$ . | 3 marks |