1) $f(x) = 2x^2 - 8x - 3$ $\quad I = \mathbb{R}$

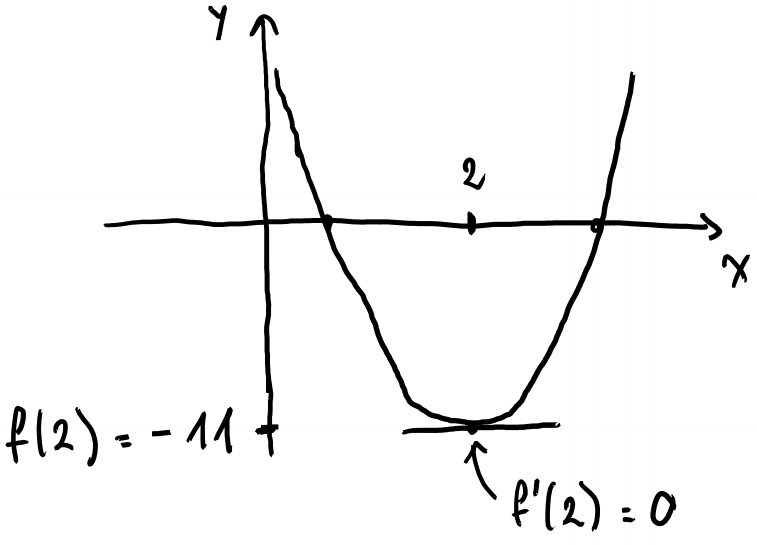
$f'(x) = 2 \times 2x - 8 + 0 = 4x - 8$

Signe de f' : $4x - 8 > 0 \iff 4x > 8 \iff x > 2$

Tableau de variations :

x	$-\infty$		2		$+\infty$
f'		$-$	0	$+$	
f		↘	$f(2)$	↗	

$f(2) = 2 \times 2^2 - 8 \times 2 - 3 = 8 - 16 - 3 = -11$

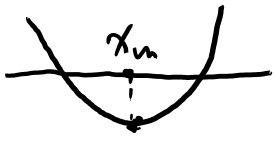


-11 est le minimum de f atteint en 2.

En générale :

Minimum si :

x		x_m		
f'	$-$	0	$+$	



Maximum si :

x		x_M		
f'	$+$	0	$-$