Tableau de variation de $f(x)$

$f(x) = (x-2)(x-1)(x+1)(x+2)$
$f'(x) = (x-2)(x-1)(x+1) + (x-2)(x-1)(x+2) + (x-2)(x+1)(x+2) + (x-1)(x+1)(x+2)$

| $x$ | $-5.0$ | | $-\frac{\sqrt{10}}{2}$ | | $0$ | | $\frac{\sqrt{10}}{2}$ | | $5.0$ |
|---|---|---|---|---|---|---|---|---|---|
| $f'(x)$ | | $-$ | $0$ | $+$ | $0$ | $-$ | $0$ | $+$ | |
| variation de $f(x)$ | $504.$ | ↘ | $-2.25$ | ↗ | $4.0$ | ↘ | $-2.25$ | ↗ | $504.$ |