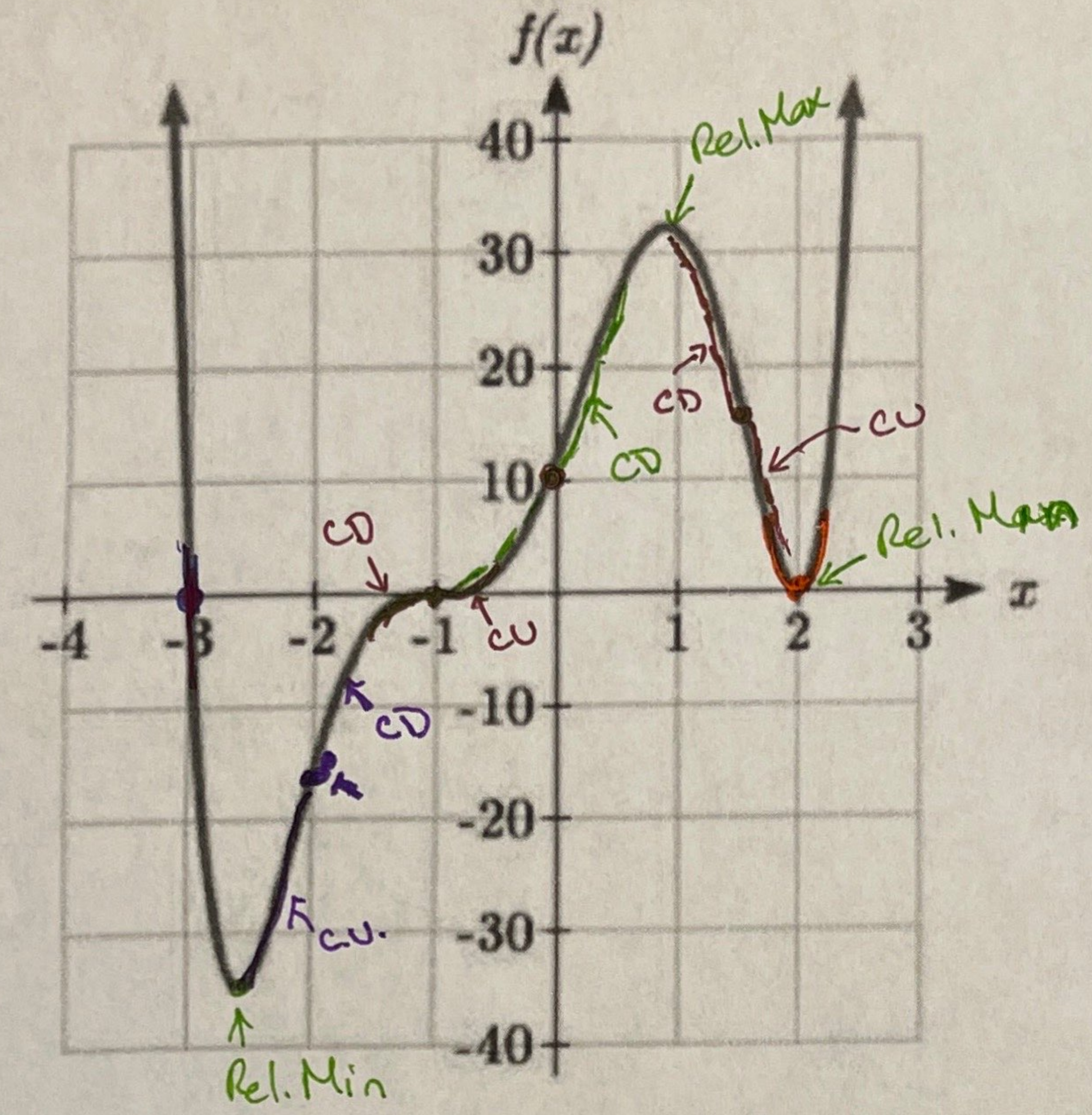

At $x=-3$, there is a root, but no change in concavity (f is concave up on either side of 3)

At $x=2$, there is a double root, but no change in concavity (f is concave up on either side of 2)

At $x=-1$, there is a triple root, but there is a change in concavity

$\Rightarrow$ P.O.I. at $x=-1$

The rel. extrema for $f(x)$ are at $x=-\frac{5}{2}$ (Rel. ~~Max~~ Min), $x=1$ (Rel. Max), $x=2$ (Rel. Min)

~~Note the~~

There is a change in concavity not just at $x=-1$, but also somewhere between $x=-1$ and $x=1$ (Draw secant lines) $\Rightarrow$ P.O.I. between $x=-1$ and $x=1$ and it looks like there is a change at $x=0$

$\Rightarrow f(x)$ is C.U. on $(-1,0)$ and C.D. on $(0,1)$

Also note there is a change in concavity between $x=1$ and $x=2$ (about at $x=\frac{3}{2}$)

$\Rightarrow f(x)$ is C.U. on $(\frac{3}{2},\infty)$ and C.D. on $(1,\frac{3}{2})$

Another change in concavity between $x=-\frac{5}{2}$ and $x=-1$ (about $x=-\frac{7}{4}$)

$\Rightarrow f(x)$ is C.U. on $(-\frac{5}{2},-\frac{7}{4})$ & C.D. on $(-\frac{7}{4},-1)$

$\boxed{\therefore f \text{ is concave up on } (-\infty,-\frac{7}{4}) \cup (-1,0) \cup (\frac{3}{2},\infty)}$