

① $\frac{d}{dx} (x^2+1)^{100} = 100(x^2+1)^{99} (2x)$ / ~~trans~~

$\frac{9}{10}$

Ans

② Find the abs. max and abs. min of the following function

A: $f(x) = 8x - 2x^4$ on $[-2, 2]$

$f(x) = 2x(4 - x^3)$

critical point at $(0, \sqrt[3]{4})$ ~~4~~

need to find these points from $f'(x)$
not $f(x)$

-2	$-4(4+8) = -48$ ✓
0	0 ? 208
2	$4(4-8) = -16$ ✓

③ A: $f(x) = 8x - 2x^4$ on $[-1, 0]$

$f(x) = 2x(4 - x^3)$

critical point at $(0, \sqrt[3]{4})$

~~-2~~

x	
-1	
0	
...	