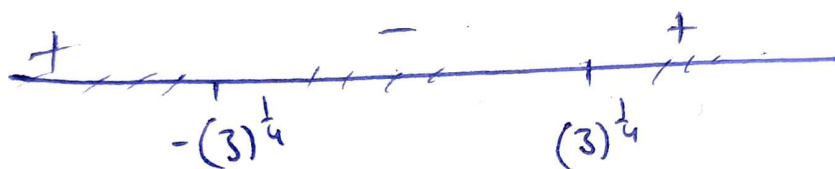


$$f(x) = x + \frac{1}{x^3}$$

$$f'(x) = 1 - \frac{3}{x^4}$$

$f'(x) = 0$ gives

$$1 - \frac{3}{x^4} = 0 \Rightarrow x = \pm (3)^{\frac{1}{4}}$$



→ strictly increasing / -1 on $(-\infty, -(3)^{\frac{1}{4}}) \cup ((3)^{\frac{1}{4}}, \infty)$

→ strictly decreasing / -1 on $(-(3)^{\frac{1}{4}}, (3)^{\frac{1}{4}})$

now see option

