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DEPT: BS(CS)

BSSIGNMENT #03"

no:- I. Find the absolute maximum and minimum values of each function on the given interval. -1 < n < 8 = 1 (21/3 $=\frac{1}{3}(\chi^{2}/3)$ contical point n=0, h(+1)= (-1)/3 = -1 $h(0)_{2}(0)^{1/3}=0$ th(8)=(8)/3 = 2 Absolute maximum at n=8 and at n= aloso lute minimum

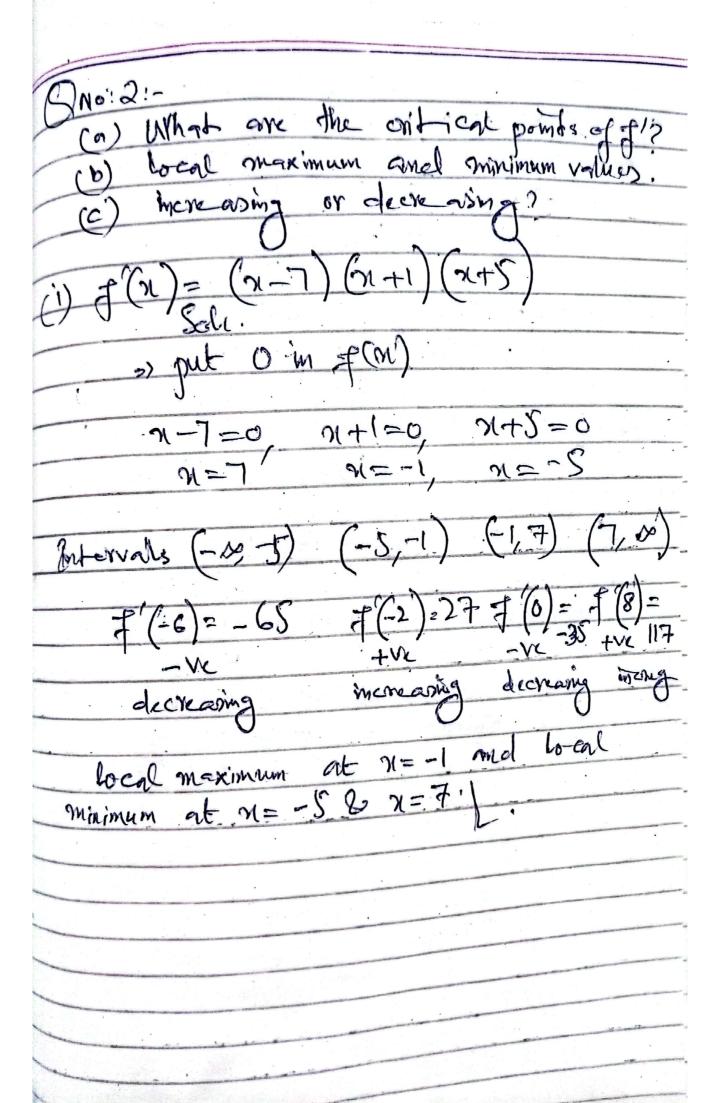
So, critical point
$$\theta = \frac{\pi}{2}$$

$$\frac{\pi}{(-\frac{\pi}{2})} = \frac{\sin(-\frac{\pi}{2})}{\sin(-\frac{\pi}{2})} = -1$$

$$\frac{\pi}{(\frac{\pi}{2})} = \frac{\sin(\frac{\pi}{2})}{\sin(\frac{\pi}{2})} = 1$$

$$\frac{\pi}{(\frac{\pi}{2})} = \frac{\sin(\frac{\pi}{2})}{\sin(\frac{\pi}{2})} = \frac{\pi}{2}$$

The absolute maximum at
$$\theta = 3/2$$
 and absolute minimum at $\theta = -3/2$



(ii)
$$f'(x) = x^{-1/2}(x-3)$$

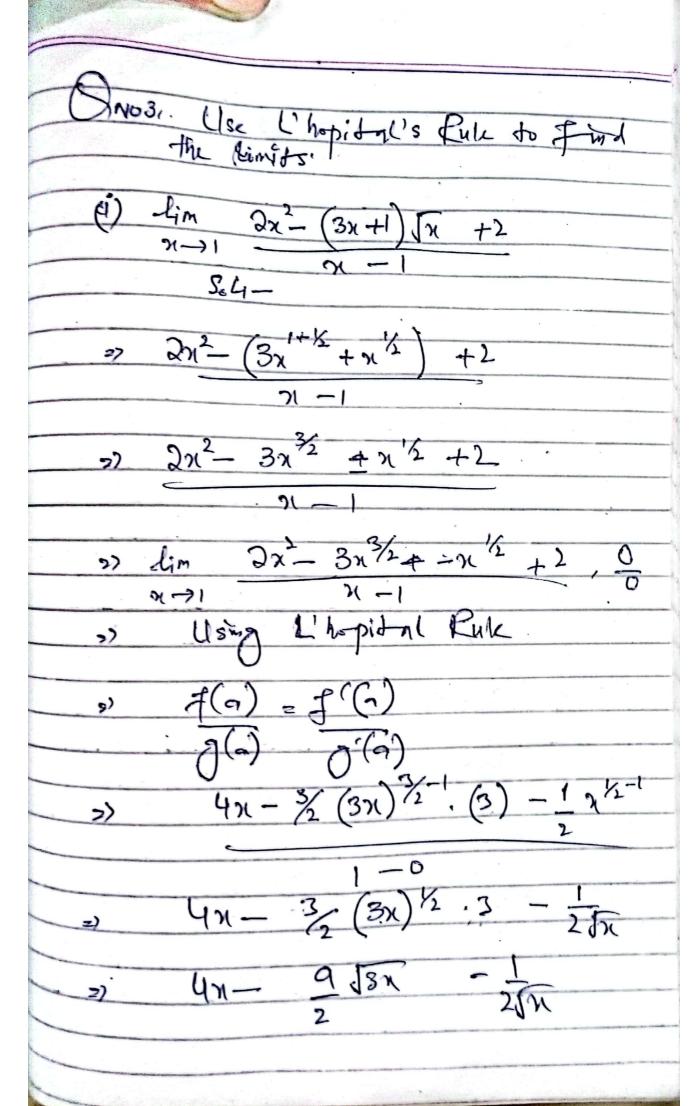
 $f(x) = x^{-3}(x)$
 $f(x) = x^{-3}(x)$

$$3 = 0$$
 $3 = 0$ $3 = 0$ $3 = 0$

Intervals
$$(0,3)$$
 $(3,00)$

$$f(-1)=4$$
 $f(1)=-2$ $f'(4)=1$
 $+\sqrt{2}$
increasing decreasing increasing

Local maximum at n=0, and boat minimum at n=3.



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him or Sol. 2) 1/21 Using Li hopidal Ruke Sec 1 - 1/2 tim sec2 (0) 2)

) Not 41. Find the most general 301. 2) 2) 77 2 $\frac{-1}{12}$ $\frac{1}{4}$ $\frac{1}{3}$ $\frac{1}{12}$ $\frac{1}{3}$ 2