

④ ابتدا مشتق گرفته و با جدول تعیین علامت حد را می یابیم.

$$y = -3x^4 + 4x^3 + 3$$

$$\rightarrow y' = -12x^3 + 12x^2$$

$$\rightarrow -12x^2(x-1) = 0 \quad \begin{cases} \rightarrow x=0 \\ \rightarrow x=1 \end{cases}$$

0	1
+	+
-	-

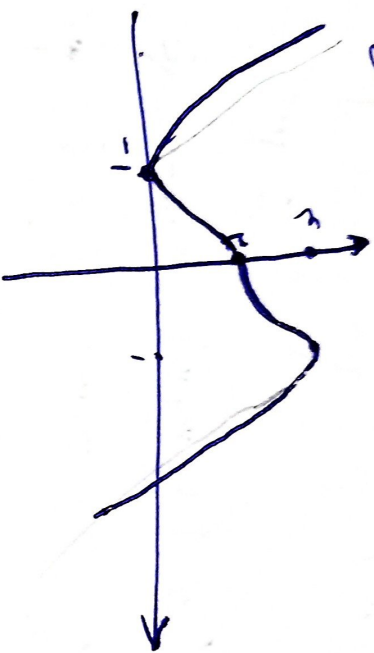
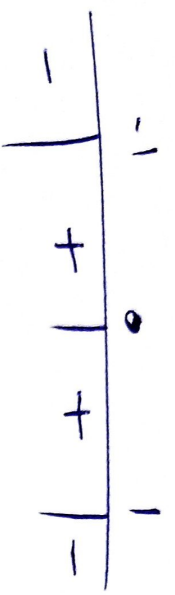
$$\lim_{x \rightarrow 1} [4x^3 - 3x^4 + 3]$$

$$\begin{aligned} 1^+ &\rightarrow [4 - 3 + 3] = [4^-] = 3 \\ 1^- &\rightarrow [4 - 3 + 3] = [4^-] = 3 \end{aligned}$$

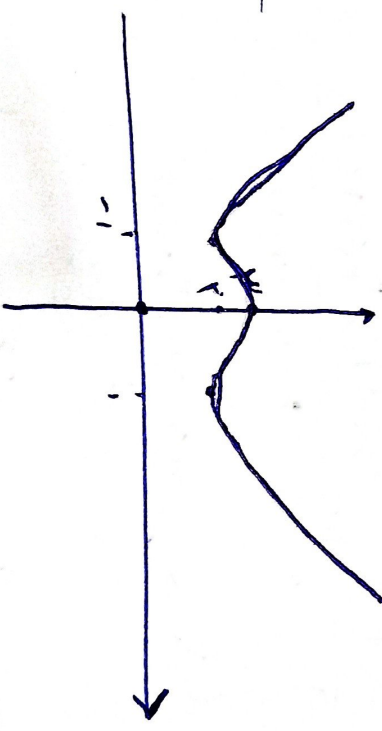
$$\begin{aligned} 0^+ &\rightarrow [0 - 0 + 3] = [3^-] = 3 \\ 0^- &\rightarrow [0 - 0 + 3] = [3^-] = 3 \end{aligned}$$

35) $-x^2 + 2x^3 + 5 = y$ Curve $-10x^2 + 10x^3 = y' \rightarrow -10x^2(x^3 - 1) = 0$

$x=0$
 $x=t$



$y = x^2 - x^3 + 10 \rightarrow y' = 2x^2 - 3x^3 \rightarrow x^2(x^3 - 2) = 0$



$x=0$
 $x=t$