$f(x) = -x^3 + 4x^2 - 3x + 7$

Determine I.R.O.C at $x = 3.5$

$[3.4, 3.5]$

$f(3.4) = -(3.4)^3 + 4(3.4)^2 - 3(3.4) + 7$

$= 3.736$

$f(3.5) = 2.625$

$$\frac{2.625 - 3.736}{3.5 - 3.4}$$

$= -11.11$

$f(x) = -x^3 + 4x^2 - 3x + 7$

A.R.O.C. from $[0, 3]$

$f(0) = 7$

$f(3) = -(3)^3 + 4(3)^2 - 3(3) + 7$

$= -27 + 36 - 9 + 7$

$= 7$

$A.R.O.C\,[0,3] = \frac{\Delta y}{\Delta x}$

$= \frac{7-7}{3-0}$

$= \frac{0}{3}$

$= 0$