

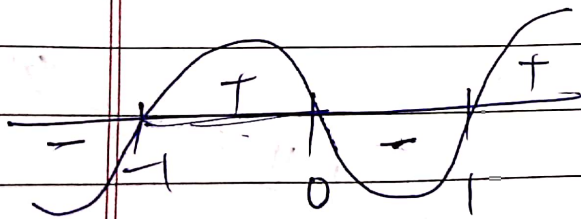
Combining Both Statements

$n \geq 1$
 Squaring Both Side
 $n^2 \geq n$

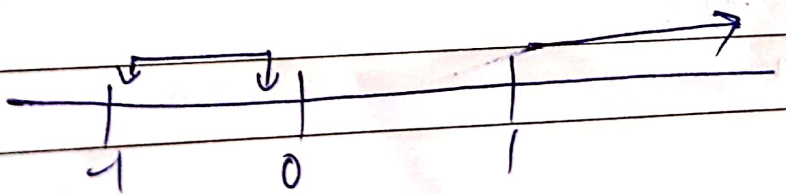
$n^3 - n \geq 0$

$n(n^2 - 1) \geq 0$

$n(n-1)(n+1) \geq 0$



$n \geq 1$ or $-1 < n < 0$



But $n = -\frac{1}{2}$

$\left(-\frac{1}{2}\right) \left(-\frac{1}{2}-1\right) \left(-\frac{1}{2}+1\right)$

$\left(-\frac{1}{2}\right) \left(\frac{-1-2}{2}\right) \left(\frac{-1+2}{2}\right)$

$\left(-\frac{1}{2}\right) \left(\frac{-3}{2}\right) \left(\frac{1}{2}\right)$

$= \frac{3}{8} \geq 0$ ✓