

Which of the following is a value of x for which the expression $\frac{-3}{x^2+3x-10}$ is undefined?

- a) -3
- b) -2
- c) 0
- d) 2

Handwritten work:

$$\begin{array}{l} \text{Factor } x^2+3x-10: \begin{array}{l} -10 \\ -2 \quad 5 \end{array} \\ \text{Test values: } x-2=0 \Rightarrow x=2, \quad x+5=0 \Rightarrow x=-5 \\ \text{Check: } 2+3(2)-10 = 4+6-10 = 10-10 = 0 \\ \text{Check: } -5+3(-5)-10 = -5-15-10 = -30 \neq 0 \end{array}$$

V.A $\rightarrow$ take the D=0, solve $x=2$ V.A
 H.A $\rightarrow$ Look at the degree $N < D \rightarrow x=-5$ V.A
 Domain $\rightarrow (-\infty, -5) \cup (-5, 2) \cup (2, \infty)$



H.A

$N=D$	$N < D$	$N > D$
divide coef.	x-axis	No HA.