



max and min for  $x(x+3)(5-x)$  when  $-1 \leq x \leq 5$



Input interpretation :

extrema

function

$x(x+3)(5-x)$

domain

$-1 \leq x \leq 5$



Global maximum :

$$\max\{x(x+3)(5-x) \mid -1 \leq x \leq 5\} = 36 \text{ at } x = 3$$

Global minimum :

$$\min\{x(x+3)(5-x) \mid -1 \leq x \leq 5\} = -12 \text{ at } x = -1$$

Plot:

