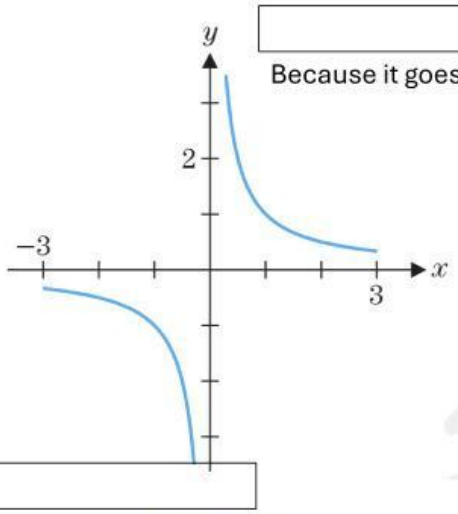


Because it goes up to ∞

Because it goes down to -∞

Remaining wrong answers drop them here, in order from left to right:

No absolute minimum

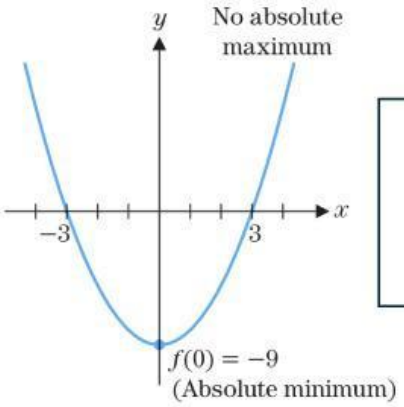
absolute minimum

No absolute maximum

absolute maximum

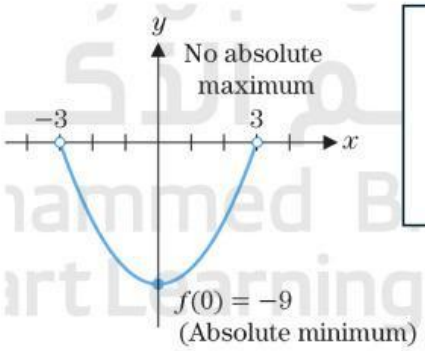
LIVEWORKSHEETS

Why does these graphs not have a maximum (Hint: check the intervals)?



$y = x^2 - 9$ on $(-\infty, \infty)$

Because the interval (- ∞, ∞) is all real numbers so the max points goes up to ∞

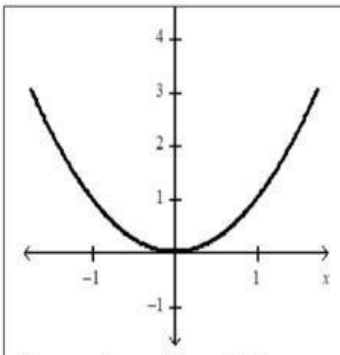


$y = x^2 - 9$ on $(-3, 3)$

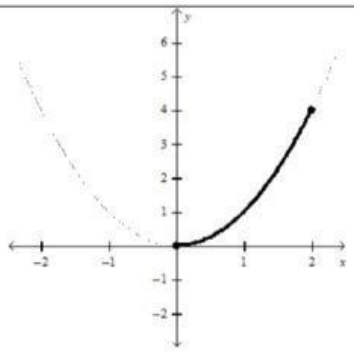
Because its an open interval and the endpoints are not included ; so they are not a maximum

LIVEWORKSHEETS

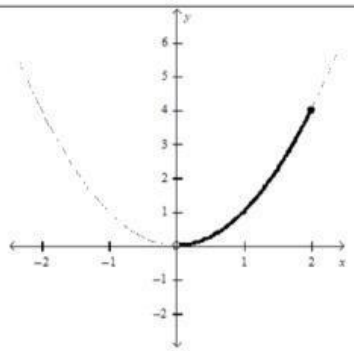
$y = x^2$



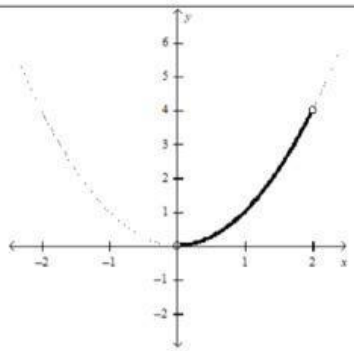
Domain: all real #s
Extrema:



Domain: [0, 2]
Extrema:



Domain: (0, 2]
Extrema:



Domain: (0, 2)
Extrema:

No absolute minimum
No absolute maximum

Absolute minimum of 0 at x=0
No absolute maximum

Absolute minimum of 0 at x=0
absolute maximum of 4 at x=2

No absolute minimum
absolute maximum of 4 at x=2

LIVEWORKSHEETS