

Answer on Question #48477 – Math – Calculus

Problem.

Sketch the graph of f by hand and use your sketch to find the absolute and local maximum and minimum values of f . (If an answer does not exist, enter DNE.)

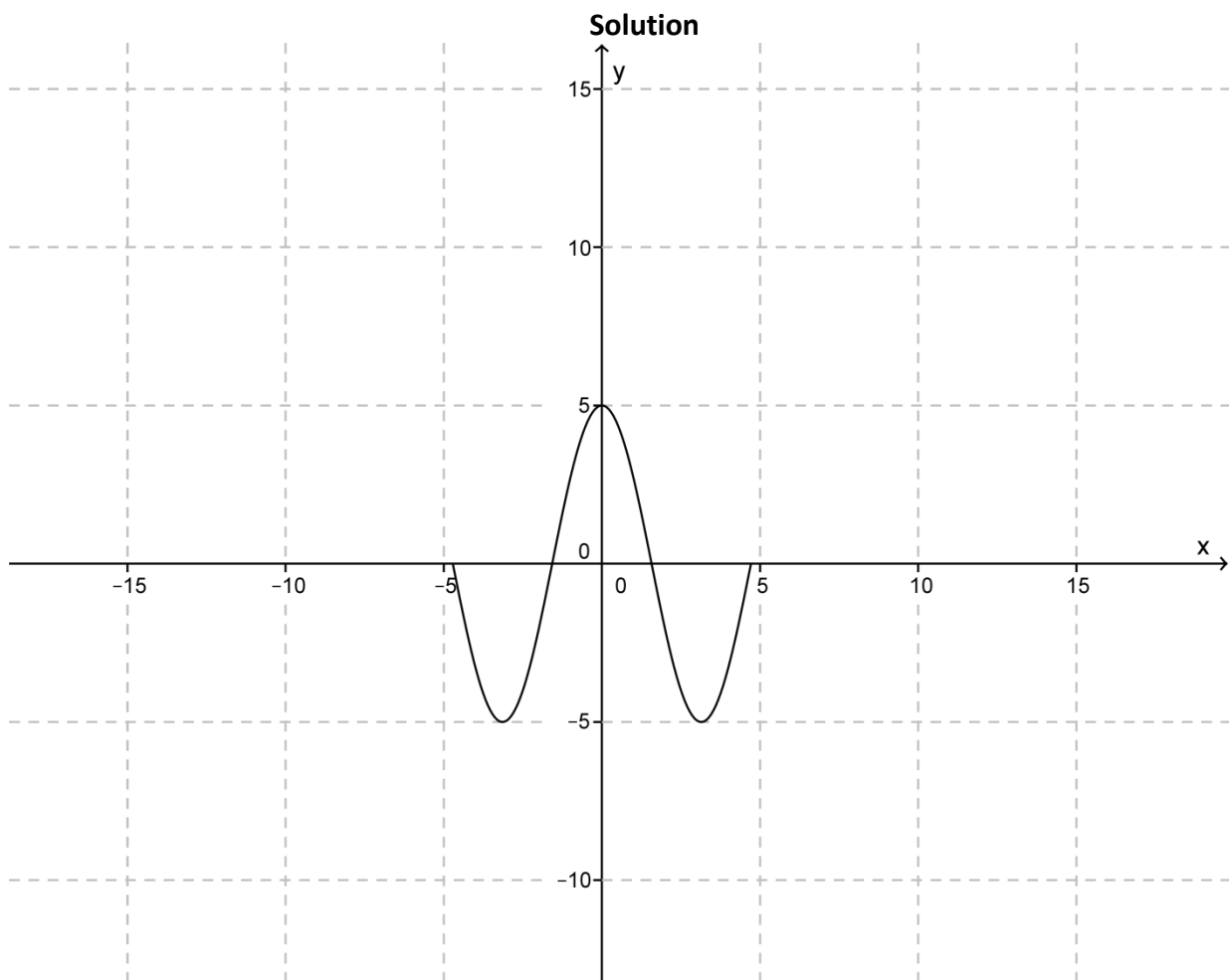
$$f(t) = 5 \cos t, \quad -3\pi/2 \leq t \leq 3\pi/2$$

absolute maximum

absolute minimum

local maximum

local minimum



The absolute maximum is 5 at $t = 0$.

The absolute minimum is -5 at $t = \pi$ and $t = -\pi$.

The local minimums are -5 at $t = \pi$ and $t = -\pi$.

The local maximum is 5 at $t = 0$.