

Exercises:

1. Find the local maxima and minima of the function:

(a) $f(x) = x(x - 3)(x + 3)$

(b) $g(x) = \frac{5}{x^2 + 5}$

(c) $h(x) = \sin(\ln(x)) \quad \{0.1 \leq x\}$

2. Find the absolute maximum and minimum of the function on the given interval:

(a) $f(x) = x^3 - x \quad \{-5 \leq x \leq 1.5\}$

(b) $g(x) = x^2 \sin(x) \quad \{-9 \leq x \leq 0\}$