

Analyze these functions for local extreme points, concavity and inflection points.

(1)  $f(x) = 2x^2 + 2x + 3$

(2)  $f(x) = -x^2 + 2x + 5$

(3)  $h(x) = x^3 + x^2 + x + 1$

(4)  $w(x) = x^3 - 6x$

(5)  $g(t) = t^3 - t^2 + t - 1$

(6)  $h(x) = x \ln x$

(7)  $g(t) = \frac{1}{t}$

(8)  $m(x) = 2x + \frac{1}{x}$

(9)  $w(x) = x^4 - 2x^2 + x + 1$

(10)  $w(s) = s^2 e^s$