
Name: _____

QUIZ 15 ♣

MATH 200
March 19, 2026

1. This problem concerns the function $f(x) = \sqrt[3]{8 - x^3}$.

(a) Find the critical points of f .

(b) Find the intervals on which f increases and on which it decreases.

(c) Use your answer from part (a) to identify the locations (x values) of any local extrema of f .

Name: _____

QUIZ 15 ♠

MATH 200
March 19, 2026

1. This problem concerns the function $f(x) = \tan^{-1}(x^2 + x - 2)$.

(a) Find the critical points of f .

(b) Find the intervals on which f increases and on which it decreases.

(c) Use your answer from part (a) to identify the locations (x values) of any local extrema of f .