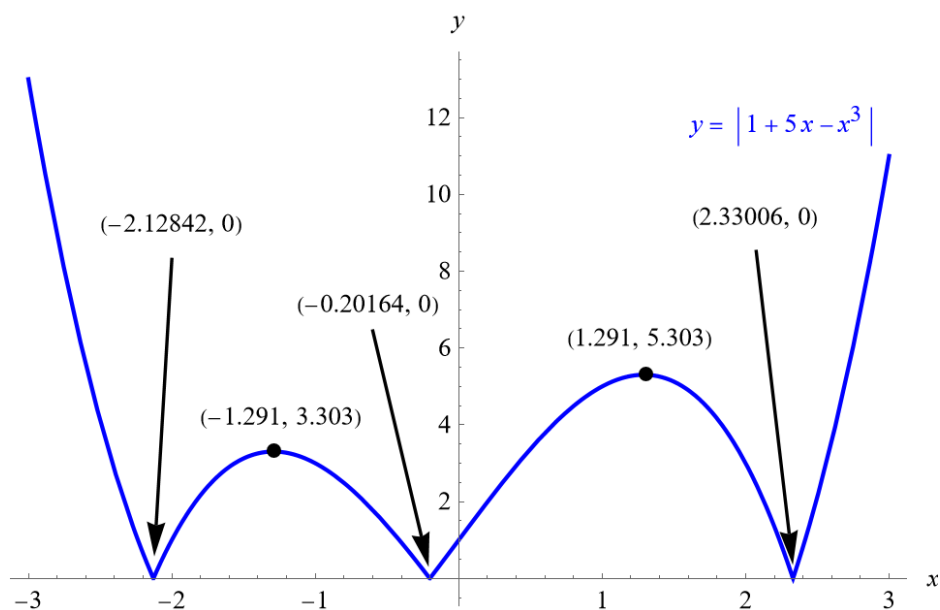


Exercise 64

Use a graph to estimate the critical numbers of $f(x) = |1 + 5x - x^3|$ correct to one decimal place.

Solution

Recall that a critical number is a value of x for which the slope of the tangent line is either zero or nonexistent.



Points where there are kinks or the slope of the tangent line is horizontal are marked. The critical numbers are

-2.12842 and -1.291 and -0.20164 and 1.291 and 2.33006 .