

Mathematics 1110H – Calculus I: Limits, derivatives, and Integrals

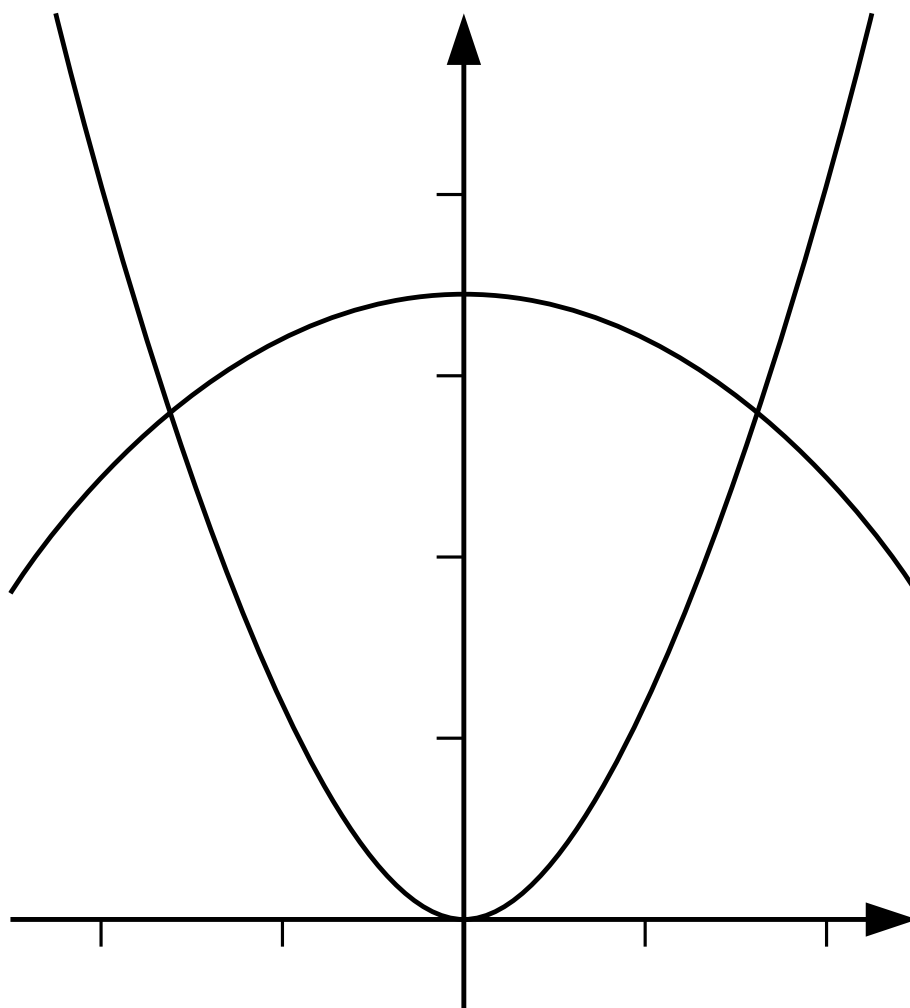
TRENT UNIVERSITY, Fall 2019

Assignment #6

An area problem

Due on Wednesday, 4 December.

1. Find the real number $a > 0$ such that the area of the finite region below the parabola $y = a - \frac{x^2}{4}$ and above the parabola $y = x^2$ is exactly $\frac{40}{3}$. [5]



Hint: This could be done entirely by hand. If you'd rather not, though, it is worth noting that in addition to the `int` operator, Maple has a general `solve` command.