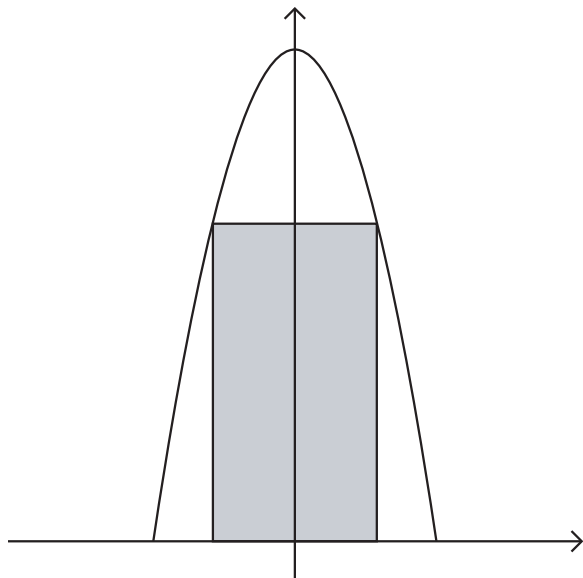


Math 151
Supplemental Exercises

1. A rectangle with its base along the x -axis has its top vertices on the parabola $4 - x^2$. What is the largest possible area of the rectangle?



2. What is the general antiderivative of $3 \sin x - \cos(5x)$?
3. Suppose $f'(x) = x^3 - 17$ and $f(4) = 10$. What is $f(x)$?
4. A car is decelerating at a constant rate of 20 ft/sec^2 . If the car is going 90 ft/sec when the clock starts at $t = 0$, how far does the car move before it stops?