MAC 2311 Hybrid Calculus I

Sections 6.1-6.2

1. Consider an object moving with velocity$ v\left(t\right)=t^{2}-1$. Find the displacement in the interval [0,2].

2) Consider an object moving with velocity$ v\left(t\right)=t^{2}-1$. Find the total distance traveled in the interval [0,2].

3) Draw the region of integration, and find the area of the region bounded by$y=x^{3}, and y=4x $by integrating with respect to *x*.

4) Draw the region of integration, and find the area of the region bounded by $y=x^{3}, and y=4x $by integrating with respect to *y*.