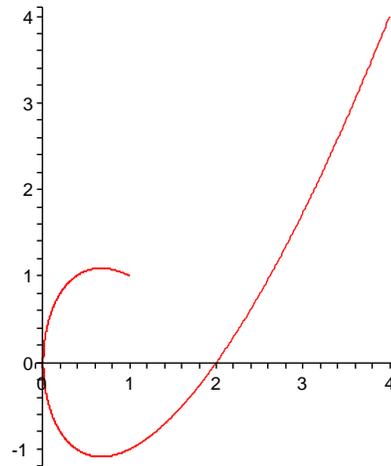


Honors Math 182 Quiz 7 Version A

1. State Taylor's Theorem.

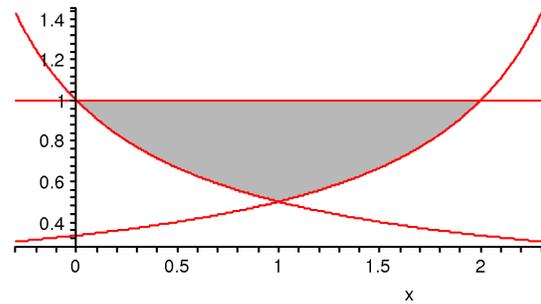
2. Find the curvature κ and the radius of curvature ρ at the point $(0,0)$ on the curve given by $(f(t), g(t))$ where $f(t) = t^2$, $g(t) = t^3 - 2t$ and $-1 \leq t \leq 2$.



Honors Math 182 Quiz 7 Version A

3. The area bounded by $y = 1/(x + 1)$, $y = 1/(3 - x)$ and $y = 1$ is depicted below.

(i) Find the volume formed by rotating this area about the x -axis.



(ii) Find the volume formed by rotating this area about the y -axis.