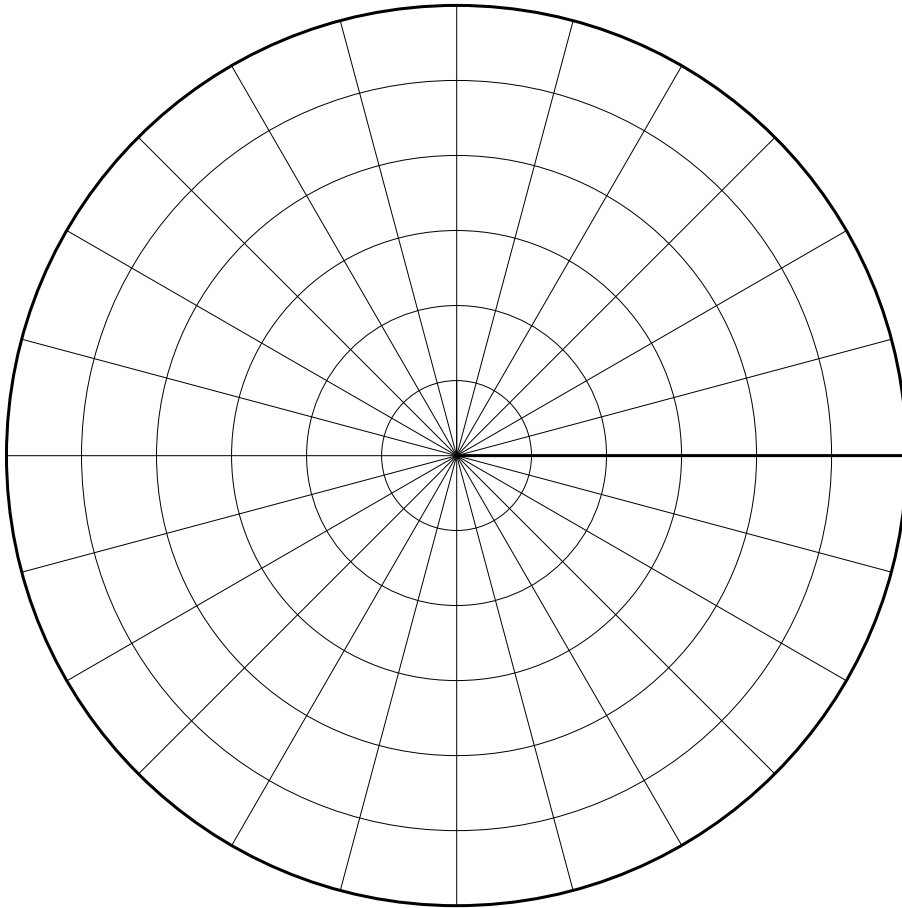


King Fahd University of Petroleum & Minerals
Department of Mathematics and Statistics
(Semester 18) Math 201 Quiz # 1

Name: _____ I.D. # _____ Sr. # _____

1. Carefully sketch the graphs of the polar curves $r = 4 \cos \theta$ and $r = 2 - 4 \sin \theta$ on the given paper.



2. Consider the parametric curve defined by $x = 3t - t^3$, $y = 3t^2$, $0 \leq t \leq 1$,
- Find the slope of the curve at $t = 1/2$.
 - Find the area of the surface generated by revolving the curve around the x-axis.