

MATH 251, Section _____
Thursday, Oct. 21, 2010

Quiz 8 (Sections 13.4, 13.5).
Dr. M. Vorobets

NAME (print): _____

No credit for unsupported answers will be given. Clearly indicate your final answer.

1. [5 pts.] Graph the curve $r = 1 + \sin \theta$

[more problems on back]

2. [5 pts.] Evaluate

$$\iint_D \sqrt{x^2 + y^2} \, dA$$

where D is the region that lies inside the cardioid $r = 1 + \sin \theta$ and outside the circle $r = 1$.