

Group Exam 6

Name: _____

Math 142

Name of group member: _____

Professor Johnson

Name of group member: _____

Problem 1: Graph the polar curves and label at least 3 distinct points on the graph.

$$r = 1 - 2 \cos(\theta)$$

$$r = 2 \sin(5\theta)$$

Signature line: _____

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Problem 2: Calculate the area enclosed by the larger loop of the polar curve $r = 1 + 2 \sin(3\theta)$

Signature line: _____

Group Exam 5

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Math 142

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Problem 3: Find the two points on the polar curve where the tangent line is vertical and the two points where the tangent line is horizontal.

$$r = 3 \cos(\theta)$$