NAME: S.No.   ID:

Maximum Marks: 15   Section: Time Allowed: 40 minutes

(1) Sketch the graph of the curve $r = 1 - 3cos\theta$.

(2) Find the points (r, θ) on the curve $r = 1 + cos\theta$ where the tangent line is horizontal.

(3) Find the area inside the both curves $r = 3 + 2sin\theta$ and $r = 2$.

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