KFUPM Term (111) Name_____Serial#_____

MATH 201 Quiz # 5(a) ID#_____Section # 22

Time: 20 Minutes Marks: 9

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1) Use polar coordinates to find the area enclosed by $r = \cos 3\theta$.

2) Set up a triple integral using $dx\ dy\ dz$ as order of integration to find volume of the solid bounded by the graph of equations
$y = 2 - z^2, y = z^2, x + z = 5$, and $x = 0$.

KFUPM Term (111) Name_____Serial#_____

MATH 201 Quiz # 5(b) ID#_____Section # 22

Time: 20 Minutes Marks: 9

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1) Use polar coordinates to evaluate $\int_{-1}^{1}\int_{0}^{\sqrt{1-x^2}}(x^2+y^2)^{3/2}\,dydx$

2) Set up a triple integral using $dz\,dy\,dx$ as order of integration to find volume of the solid bounded by the surface $y = x^2$ and planes $y + z = 9$ and $z = 0$.