

MATH 261 Quiz 12

Name: .

Student number:

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Show all work. 5 points each.

1) Set up the integral for finding the surface area of of the paraboloid  $z = 4 - x^2 - y^2$  with  $z \geq 0$ . Include limits of integration but you may use either rectangular or polar coordinates

2) Evaluate the triple integral  $\int_0^1 \int_0^z \int_0^{x+z} 6xz \, dy \, dx \, dz$