

MATH 261 Quiz 12

Name: .

Student number:

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 $\int_0^1 \int_0^z \int_0^{x+z} 6xz \, dy \, dx \, dz$