

MATB41 WEEK 11 QUIZ 1 LEC02

Question 1

Integrate $f(x, y, z) = x^2 + y^2 + z^2$ over the domain D where D is the region:
inside $x^2 + y^2 + z^2 = 4$, and
below $z = \sqrt{x^2 + y^2}$, and
above $z = 0$.

(You should use the "correct" coordinate system.)