

MATH 116-02 QUIZ 9

Surname\ Name:

ID:

Problem. Convert

$$I = \int_0^{2\pi} \int_0^{\sqrt{2}} \int_r^{\sqrt{4-r^2}} r^2 dz dr d\theta, \quad r \geq 0,$$

(a) to rectangular coordinates with the order of integration $dz dx dy$

(b) to spherical coordinates