

# Suggested Problems for Final – Math 2032 Spring 2008

## Department of Mathematics Temple University

Section/Problems

10.1/25,45, 51

10.2/14, 23, 31, 34

10.3/1, 2, 7, 13

10.4/6, 7, 17, 23

10.5/3, 10, 19 (no drawing), 21, 22, 23 57

11.1/3, 4, 17, 19

11.2/4, 5 6

11.3/2, 5, 13

11.4/2, 3, 4 (find **T** only for these problems)

12.1/(find domain and range and plot the level line for the indicated value(s) of  $k$ ) 2 ( $k = 2, 5$   
( $k = -2, 6$   $k = -3, 7$   $k = \sqrt{7}, 8$   $k = \sqrt{5}, 9$   $k = e^{-1}$ )

12.3/11, 12, 27, 30, 43, 45, 46

12.4/3, 5, 9, 10, 11

12.5/5, 13, 18, 21

12.6/5, 6, 11

12.7/23, 25

13.1/15, 21

13.2/7, 9, 25, 27

13.3/6

13.4/7, 13, 16

13.5/(3, 5 (do any one way)), 13, 27, 31

13.7/15, 19, 37, 53, also, for the integral

$$\int_{-2}^0 \int_{-\sqrt{4-x^2}}^{\sqrt{4-x^2}} \int_{-\sqrt{4-x^2-y^2}}^0 z \sqrt{x^2 + y^2 + z^2} dz dy dx$$

Express in both cylindrical and spherical coordinates. DO NOT EVALUATE

14.1/15

14.2/3, 11, 14, 23 (Circulation only)

14.3/3, 5, 9, 17, 21

14.4/3, 5, 15, 17, 19