MATH 223 Fall 2022 Assignment 28

Due: Wednesday, November 30

Reading

Read carefully Section 7.4 "Surfaces of Revolution," Section 7.6 "Curvature and Normals" and Section 7.7 "Flow Lines and Differential Equations" in our text *Multivariable Calculus: A Linear Algebra Based Approach*.

Writing

Write out careful and complete solutions of Exercises 17ace, 18ad, 19a, 20, and 21 of Chapter 7.

Suggestions:

18a: The substitution $u = 4 + 9t^{2/3}$ is useful.

18d: The identity $1 + \cos 2\theta = 2\cos^2 \theta$ with $\theta = t/2$ may be useful.

