Problem Set 2
September 25, 2023

All numbered exercises are from the textbook *Calculus Vol. 3*, by OpenStax.

1. Exercises 2.4.183–195 (odd only).

2. Exercise 2.4.196.

3. Exercise 2.4.201.

4. Exercises 2.4.211–215 (odd only).

5. Exercise 2.4.221.

6. Exercises 2.5.243–263 (odd only).

7. Exercises 2.5.275–289 (odd only).

8. Exercise 2.5.295.

9. Find the angle between the planes $\pi_1 : x + y + z - 1 = 0$ and $\pi_2 : 2x - y + 3z + 1 = 0$, and find the symmetric equations of the line l of intersection of π_1 and π_2.

10. Find the distance between the point $P(0, 0, 3)$ and the plane π containing the x-axis and parallel to the line $l = \{(x, y, z) \in \mathbb{R}^3 : x = 2 + t, y = 2t - 1, z = 3t, t \in \mathbb{R}\}$.