Assignment 1

Sairam V C Rebbapragada

Abstract—**This document explains the concept of parallel planes by solving a problem.**

Download the python code from

and latex-tikz codes from

1 PROBLEM

Find the distance between the two planes $(2\ 3\ 4)x = 4$ and $(4\ 6\ 8)x = 12$

2 EXPLANATION

If the two planes are of the form $n^T x = c_1$ *and* $n^T x = c_2$, Then the distance between the planes is given by :

$$\frac{|c_1 - c_2|}{\|\mathbf{n}\|}$$

3 SOLUTION

So, the distance between the given planes is:

$\frac{|4-6|}{\|[234]\|} = \frac{2}{\sqrt{29}}$

Assignment-1 : Parallel Planes