

Written Homework 14

Math 126

Solve each of the following problems. Write your solutions clearly and neatly on separate paper, explaining your reasoning with complete sentences. Submit your work either in class or in the homework mailbox (RMS level 3, near the fireplace) by 4:00pm on **Friday, November 15**.

For these problems, you must explain your reasoning. Explain your thought process and how you know your answer is correct. A correct answer without justification will receive no credit.

1. Find any two vectors that are parallel to the plane defined by

$$2x + 3y - z = 5.$$

Make sure your two vectors are not parallel with each other.

2. Find an equation of the plane passing through the points $(2, 3, -1)$, $(3, 4, 2)$, and $(1, -2, 0)$.
3. Find an equation of the plane that contains the y -axis and makes an angle of $\pi/6$ with the positive x -axis.