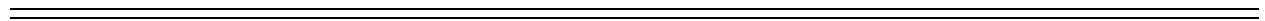


SECTION : (circle one) NAME : _____
 12:30–1:35 1:45–2:50

Math 8

due Monday, February 22, 2010
Homework #7 — covers Lectures 19 & 20

INSTRUCTIONS: Collaboration on homework is encouraged. The use of computing devices is allowed on homework (but *not* on exams). Please feel free to attach extra pages if your solutions require them. A correct answer with incorrect work will be considered wrong.



FERPA RELEASE: Because of privacy concerns, we are not allowed to return your graded homework in lecture without your permission. If you wish us to return your homework in lecture, please sign on the line indicated below. Otherwise, you will have to pick your homework up in your instructor's office.

SIGN HERE: _____.

Problem	Points	Score
1	4	
2	4	
3	4	
Total	12	

1. (4) Suppose that \mathbf{a} and \mathbf{b} are vectors such that $\text{proj}_{\mathbf{a}}(\mathbf{a} + \mathbf{b}) = \mathbf{a}$. What can you conclude about \mathbf{a} and \mathbf{b} ?

2. (4) Find the parametric equations of the line of intersection of the two planes $x + y + z = 3$ and $x + 2y + z = 5$.

3. (4) Find the distance from the point $(1, 0, 2)$ to the plane $2x + y - z = 1$.