MATH 171-08c, Quiz 2

Guidelines

1. You may use your class notes and text, but nothing else.
2. Begin by answering the questions in the space provided; you may write on both sides of the paper. You may also attach additional sheets if necessary; if you do, please staple everything together before submission. Write your name (two names if you are working with a partner) in the top right corner. Write neatly and legibly; shoddy presentation may lead to appropriate penalization.

Due: Friday, Sep 12th (by 4:00 pm)

1. (8 marks) Derive a set of parametric equations for the line segment which starts at the point $(1, -1)$ and ends at the point $(5, 2)$.

2. (8 marks) Obtain a vector equation for the straight line which passes through the point $(1, 3)$, and is perpendicular to the vector $2i - 3j$.

3. (9 marks) Give a formal proof (i.e., an $\epsilon - \delta$ argument) for the following:

$$\lim_{x \to -1} (2 - 3x) = 5$$