Exam #1-B

In taking this exam, I (the examinee) understand that I may not work with anyone else, including conferring with others (students, or anyone else); exchanging information, answers or ideas; or in aiding or being aided by others in the completion of this assignment. I understand that failure to follow these rules is considered cheating, and may subject me to a significant reduction in my grade at the discretion of the professor. I certify that I have personally prepared the answers to this assignment in accordance with the above stated rules.

Printed Name of Examinee: ____________________________

Signature of Examinee: ____________________________

Date: ___________ 4/3/2009 ___________

Note: Write all answers on the front of the following pages.
Turn these sheets in to be graded.
If you need more space for your answers, you may staple additional sheets of paper to the page on which the question is asked. In other word, keeps the question and answer pages together.
Remember, neatness counts. Please try your best to have a neat and easy-to-read format.
State units and digits as necessary.
State your assumptions, if needed.

1. Please design the following doubly reinforced concrete beam to resist \( M_u = 375 \text{ ft-kips} \). Please use \( f'c = 4000 \text{ psi} \), \( f_y = 60 \text{ ksi} \) and the section dimension on problem 5.30 on page 144.

2. Solve problem 5.24 on page 143.