PEER ASSISTED STUDY SESSIONS – Mock Midterm 2 (Workshop 7)

Facil: Ross Cruikshank Course: ECOR 1101 Date: Mar. 4 - 8, 2013

Office Hour: Wednesday 9:00 – 10:00, TB 302(SASC)

PASS MOCK EXAM – FOR PRACTICE ONLY

Dates and locations of mock exam take-up:
1. Monday March 4, 2013, 6:00-7:30 in MC 5050
2. Thursday March 7, 2013, 6:00-7:30 location TBA

IMPORTANT:

The purpose of this mock exam is to give you practice answering questions in a timed setting and to help you to gauge which aspects of the course content you know well and which are in need of further development and review. Use this mock exam as a learning tool in preparing for the actual exam.

Please note:

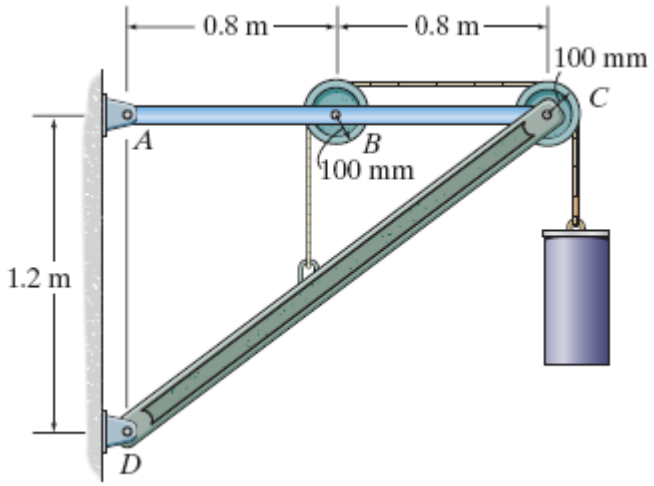
- Come to the PASS session with your mock exam complete. There, you can work with other students to review your work.
- Often, there is not enough time to review the entire exam in the PASS session. Decide which questions you most want to review – the facilitator may ask students to vote on which questions they want to discuss.
- Facilitators do not bring copies of the mock exam to the session. Please print out and complete the exam before you attend.
- Facilitators do not produce or distribute an answer key for mock exams. Facilitators help students to work together to compare and assess the answers they have. If you are not able to attend the PASS session, you can work alone or with others in the class.

Problem 1

The frame is used to support a 50 kg cylinder. Determine

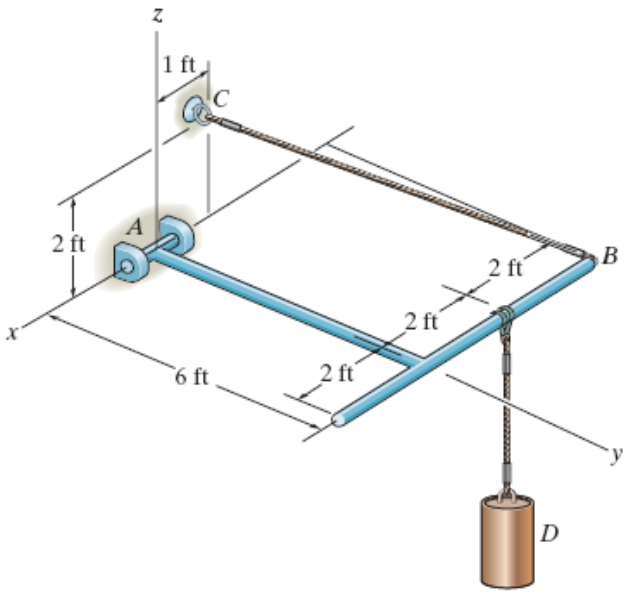
a) the tension in the cable at E

b) the force in the pin at C in member ABC



Problem 2

The member is supported by a pin at A and a cable BC. If the load at D is 300 lb, determine the x,y,z components of reaction at the pin A and the tension in cable BC.

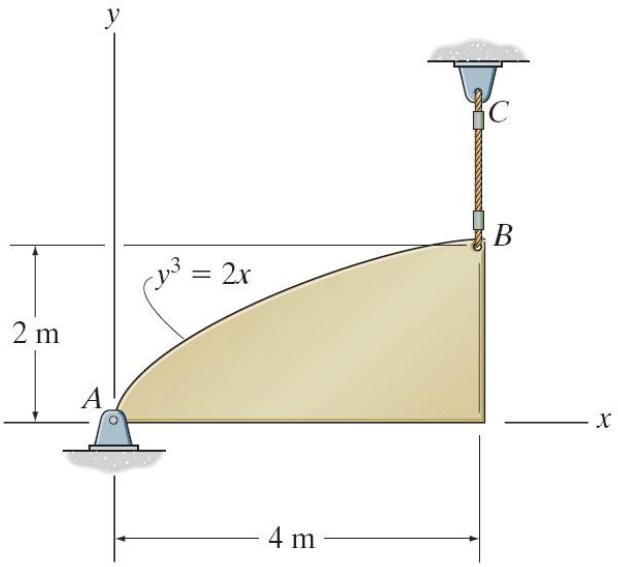


Problem 3

The plate is made of steel having a density of 7850 kg/m^3. If the thickness of the plate is 10 mm, determine

a) the centre of gravity of the plate

b) the horizontal and vertical components of reaction at the pin A and the tension in cable BC.



Problem 4

Determine the internal normal force, shear force, and moment at point D in the overhang beam. Point D is located just to the left of the roller support at B, where the couple moment acts.