

Name:

Exam 3a Rubric

- Transverse shear analysis (50 pts)
 - Problem interpretation, reasonable starting assumptions
 - Statics/reaction forces
 - Neutral axis calculation for non-symmetric cross-section
 - Correct calculation of moment of area (Q)
 - Correct calculation of moment of inertia (I)
 - Correct transverse shear stress
 - Reasonable engineering conclusions based on analysis
- Shear flow (20 pts)
 - Correct use of shear flow
 - Correct calculation of maximum shear stress
- Combined Loading (30 pts)
 - Correct initial stress state
 - Mohr's circle
 - (Approximately) correct principal stresses
 - (Approximately) correct maximum shear stress