

Exam 11/05/20 13:00 - 15:00

Advanced Stress Analysis + FEA
(M6X00420)

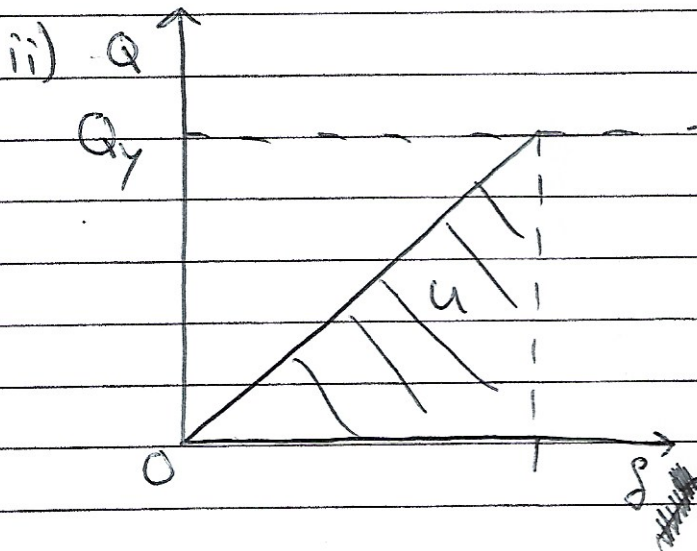
Sion Evans (P150600)

1/20

Two

a) i) $G = \frac{\tau}{\gamma}$ $\tau = \frac{Q}{A\gamma}$

$\gamma = \frac{Q}{AG}$



$u = \frac{1}{2} Q \gamma$

$\gamma = \frac{\delta}{L}$

$\frac{1}{\gamma} = \frac{L}{\delta}$

$\delta = \frac{QL}{AG}$

$u = \frac{1}{2} Q \left[\frac{QL}{AG} \right]$

$= \frac{Q^2 L}{2AG}$