MODULE 3C7 (Mechanics of Solids): Numerical answers to Tripos examination 2014

1.   (b)   Yielding occurs first

2.   (c)   for yield to occur simultaneously $l = d/2$.

3.   (b) $\tau_{max} = (2T)/(\pi a b^2)$
         (c)   rectangle is 1.7 times stiffer

4.   (b) $\frac{c}{a} = Y/[2(Y - T)]$