

C) Ichen Morgen Markt Lern
(2 Punkte)

$$M_{\max} = \frac{10,000 \times 3^2}{8.14 \times 10^{-5}} = 31,250 \text{ N/m.}$$

$$\frac{31,250 \times 5}{5.2 \times 10^{-3}} = 30.04 \text{ MPa.}$$

$$D) 30.04 \times 5 = 150.2.$$

E) $150.2 \times 5 = 751$, I would choose 751^{MPa} as
my minimum allowable ~~be~~ yield strength

F) To use cheaper steel I would make
my dimensions bigger to compensate for the
cheaper steel.