

## Quiz 2 answer

$$HB = 490$$

$$S_{ut} = 0.495(490) = 242.6 \text{ kpsi} > 212 \text{ kpsi}$$

$$S_e = 100 \text{ kpsi}$$

$$a = 1.34, b = -0.085$$

$$ka = 1.34(242.6) - 0.085 = 0.840$$

$$kb = (1/4/0.3)^{-0.107} = 1.02$$

$$S_e = k_a k_b S_e = 0.840(1.02)(100) = 85.7 \text{ kpsi}$$