Q2

Exercise 66 on page 532.

Epoxy
$s_1^2 = 0.02576$
$s_1 = 0.1605$
$m = 4$

MMA prepolymer
$s_2^2 = 0.005491$
$s_2 = 0.07411$
$n = 4$

For 90% confidence interval: $\alpha = 0.10$

Conidence Interval

$$\left(\frac{s_1}{s_2} \cdot \frac{1}{\sqrt{F_{\alpha/2,m-1,n-1}}}, \frac{s_1}{s_2} \cdot \sqrt{F_{\alpha/2,m-1,n-1}}, \right)$$

$$\left(\frac{0.1605}{0.07411} \cdot \frac{1}{\sqrt{F_{0.05,3,3}}}, \frac{0.1605}{0.07411} \cdot \sqrt{F_{0.05,3,3}}, \right)$$

$$(0.2335, 20.09)$$