

Remarks: See §2.2.1, pages 19 till 21
 See §2.3, pages 24 till 26
 See §2.6, pages 34 onwards

Answers :

- a. wire c
- b. wire d
- c. wire b

Explanation:

a. $\sigma^{(c)} = 4 \frac{F}{A}$

$$\sigma^{(a)} = \frac{1}{2} \frac{F}{A}; \sigma^{(b)} = \frac{F}{A}; \sigma^{(d)} = 3 \frac{F}{A}$$

b. $\varepsilon^{(d)} = \frac{3}{2} \frac{F}{EA}$

$$\varepsilon^{(a)} = \frac{1}{2} \frac{F}{EA}; \varepsilon^{(b)} = \frac{F}{EA}; \varepsilon^{(c)} = \frac{4}{3} \frac{F}{EA}$$

c. $\Delta \ell^{(b)} = 3 \frac{F \ell}{EA}$

$$\Delta \ell^{(a)} = 2 \frac{F \ell}{EA}; \Delta \ell^{(c)} = \frac{8}{3} \frac{F \ell}{EA}; \Delta \ell^{(d)} = \frac{3}{2} \frac{F \ell}{EA}$$