**ERRATA**

# Introduction to Linear Elasticity

## Third Edition

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Errata for Introduction of Linear Elasticity 3rd Ed.

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| | Original | Errata |
|---|---|---|
| 1 | Page 12, Exercise 1.8<br>“Write the divergence theorem defined in (1.18a) and (1.18b) in indicial notations” | “Write the divergence theorem defined in (1.14) in indicial notation” |
| 2 | Page 12, Ex. 1.9<br>“$\varepsilon_{ijk}A_{ij}\mathbf{e}_k$” | “$\varepsilon_{ijk}A_{j,i}\mathbf{e}_k$” |
| 3 | Page 43, Ex. 2.1(a), second row<br>“$\sigma_{21} = \sigma, \sigma_{22} = 0, \sigma_{33} = 0$” | “$\sigma_{22} = \sigma, \sigma_{23} = 0, \sigma_{33} = \sigma$” |
| 4 | Page 45, Ex. 2.11<br>“$\sigma_{ns} = [\sigma_{ik}\sigma_{jm}n_k n_m(\delta_{km} - n_k n_m)]^{1/2}$” | “$\sigma_{ns} = [\sigma_{ik}\sigma_{jm}n_k n_m(\delta_{ij} - n_i n_j)]^{1/2}$” |
| 5 | Page 67, Ex. 3.1<br>“$uy$” | “$u_y$” |
| 6 | Page 69, Ex. 3.6 (b)<br>“$u_2 = y_3 = 0$” | “$u_2 = u_3 = 0$” |
| 7 | Page 69, Ex. 3.8(a)<br>$R_1 = \cdots = 0$<br>$R_2 = \cdots = 0$<br>$R_3 = \cdots = 0$ | $R_3 = \cdots = 0$<br>$R_1 = \cdots = 0$<br>$R_2 = \cdots = 0$ |
| 8 | Page 144<br>Eq. (7.23a,b,c) | $\sigma_{rr} = \alpha_{ri}\alpha_{rj}\sigma_{ij}$<br>$\sigma_{\theta\theta} = \alpha_{\theta i}\alpha_{\theta j}\sigma_{ij}$<br>$\sigma_{r\theta} = \alpha_{ri}\alpha_{\theta j}\sigma_{ij}$ |
| 9 | Page 145<br>Eq. (7.24), table head “x, y, x” | Table head should be “x, y, z” |
| 10 | Page 179<br>Ex. (7.2c) | Add condition “assume $v = 0.3$, $E = 30 \times 10^3$” |
| 11 | Page 184, Ex. 7.20<br>“plane strain case” | “plane stress case” |
| 12 | Page 185, Ex. 7.21<br>$\frac{1}{r}(r\phi, r), r + E\alpha\Delta T = 0$ | $\nabla^2\left[\frac{1}{r}(r\phi, r), r\right] + E\alpha\Delta T = 0$<br>Hint: Generalize (7.8) based on (4.42). |
| 13 | Page 259, Ex. 9.7(a)<br>$\phi$ satisfies (9.107) and (9.108) | $\phi$ satisfies (9.114) and (9.115) |
| 14 | Page 329, Ex. 12.4<br>The shaft is subjected to axial load and P | The shaft is subjected to axial load P |
| 15 | Page 281, Ex. (10.4)<br>$\varepsilon(t) = C\sigma_0$<br>$C = C_g + \frac{C_v}{s + 1/\tau}$ | $\varepsilon(s) = C\sigma(s)$<br>$C = \frac{C_v C_g}{C_g + \frac{C_v s}{s+1/\tau}}$ |