

Errata: *Elasticity Theory, Applications & Numerics*, M. H. Sadd – Third Edition Printing

- Page 33 Equation (2.1.5); middle matrix element should be $\partial v / \partial y$
- Page 93 Equation in last line of Exercise 4.12 should read: $p = -\sigma_{kk} / 3$
Case labels (a), (b), (c) in Exercise 4.13 should not be in bold
- Page 101 Equation (5.3.1); on LHS last sign should be minus instead of plus.
- Page 138 An additional line of text should be added to the end of Exercise 6.14: “where α is the angle of twist/length and reference should be made to relation (9.3.18).”
- Page 146 Second equation in (7.2.5) should read $\mu \nabla^2 v + \dots$
- Page 180 Last sentence in second paragraph should read: “Exercise 8.15 demonstrates such an example.”
- Page 195 Line after equation (8.4.41) should read: “where A , B and C are constants of integration, and $K = 0$ to satisfy (8.4.37);”
Next eliminate K term in equation (8.4.42)₂ and in following un-numbered equation to read “ $C = 0$, $B = \dots$ ”
- Page 195 First line after equation (8.4.42) should read: “ \dots (see Exercise 7.22).”
- Page 206 Equation (8.4.62)₆ should read: $\int_a^b \sigma_\theta(r, \pi/2) r dr = 0$
- Page 214 Last two text lines before equation (8.5.2) should read: “while the corresponding displacements for the tangential load case can be determined from Exercise (8.31), assuming no vertical displacements of the y -axis and no rotation. Summarizing these results gives”
- Page 214 Last line in equation (8.5.2) under Tangential loading column should read

$$u_\theta(r, 0) = u_\theta(r, \pi) = \frac{(1 - \nu)X}{2E}$$
- Page 215 Last line in equation (8.5.3) should read

$$\bar{u}_y = -\frac{2}{\pi E} \int_{-a}^a p(s) \log|x - s| ds + \frac{1 - \nu}{2E} \left[\int_{-a}^x t(s) ds - \int_x^a t(s) ds \right] + a_2$$
- Page 229 Equation results in Exercise 8.31 should read:

$$u_r = -\frac{(1 - \nu)X}{\pi E} \theta \sin \theta - \frac{2X}{\pi E} \log r \cos \theta + A \sin \theta + B \cos \theta$$

$$u_\theta = -\frac{(1 - \nu)X}{\pi E} \theta \cos \theta + \frac{2X}{\pi E} \log r \sin \theta + \frac{(1 + \nu)X}{\pi E} \sin \theta$$

$$+ A \cos \theta - B \sin \theta + Cr + K$$
- Page 239 Remove stray mark on last line of Equation (9.3.5).
- Page 273 Exercise 9.6; compatibility relation in terms of stress should be

$$\frac{1}{r} \frac{\partial \tau_{r\theta}}{\partial \theta} - \frac{\partial \tau_{\theta r}}{\partial r} - \frac{\tau_{\theta\theta}}{r} = -2\mu\alpha$$
- Page 278 Third line from bottom of Exercise 9.26, should have “ \dots ”

$$a_1 = -\mu\alpha / 7\pi^4, \dots$$
- Page 360 Equation (11.7.14), fourth line should read

$$C_{44} = 2\mu_R, C_{22} - C_{23} = 2\mu_\theta = \frac{E_\theta}{(1 + \nu_{\theta R})}$$
- Page 367 First equation in Exercise 11.26 should read:

$$r^2 \frac{d^2 u}{dr^2} + r \frac{du}{dr} - \frac{E_\theta}{E_r} u = -\frac{(1 - \nu_{r\theta} \nu_{\theta r})}{E_r} \rho \omega^2 r^3$$
- Page 389 Figure 12.6; make shading within dotted boundary either slightly lighter or darker than general example background.
- Page 528 Second line in Exercise 16.8* should make reference to “Exercise 8.26”
- Page 576 In Index add entry “Fixity Conditions, 162”