

# Errata for *Fundamentals of Engineering Review*

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The symbol  $\rightarrow$  means “is replaced with”

1. P.19, No. 1.3:  $x^4 \rightarrow x^{-4}$
2. P.21, No. 1.24:  $x^2 \rightarrow 2x^2$
3. P.22, No. 1.30(A): 63 195  $\rightarrow$  21 065
4. P.22, No. 1.32: 12  $\rightarrow$  24
5. P.23, No. 1.10:  $= 2 - 2(x - 2) = 6 - 2x \rightarrow = 2 - 2(x + 1) = -2x$
6. P.25, No. 1.27: ... and 2.  $\rightarrow$  ... and -2
7. P.25, No. 1.30: The equations should be:

$$\oint_A y^2 dA = \frac{1}{3} \int_0^4 y^3 dx = \frac{1}{3} \int_0^4 27x^6 dx = \frac{9}{7} \cdot 4^7 = 21065$$

8. P.28, Example 2.2: 8.522  $\rightarrow$  9.244, 0.5033  $\rightarrow$  0.5242, 2.919  $\rightarrow$  3.040 (2 places)
9. P.34, Example 2.8: 2.575  $\rightarrow$  2.275
10. P.35, Eq. 2.35:  $\chi^2 \rightarrow Y$
11. P.40, No. 2.40(D): 0.11  $\rightarrow$  0.067
12. P.65, line 9:  $2Cl^{\bar{1}} \text{ \textcircled{R}} 2Cl^{1-}$
13. P.67, Example 4.6: 14g  $\rightarrow$  28 g, 0.1  $\rightarrow$  0.05 (2 places), 0.55  $\rightarrow$  0.50 (2 places),  
0.82  $\rightarrow$  0.90 (2 places), 0.18  $\rightarrow$  0.10 (2 places)
14. P.73, line 8 from bottom:  $Cl^{\bar{1}} \text{ \textcircled{R}} Cl^-$  and  $1SO_4^{\bar{2}} \text{ \textcircled{R}} 1SO_4^{2-}$
15. P.84, 2<sup>nd</sup> line after eq. 5.3:  $y \cong 1 \dots y = 1 \rightarrow y = 1 \dots y \cong 1$
16. P.86, 2 lines above Example 5.13: “under”  $\rightarrow$  “above”
17. P.90, No. 5.16:  $y = 1.0 \rightarrow y = 1.1$
18. P.93, No. 5.16:  $(1.0)^2 \rightarrow (1.1)^2$ , 9.3  $\rightarrow$  7.7, 93  $\rightarrow$  77
19. P.98, Example 6.2: Change to:  $\mathbf{M}_1 = \mathbf{r}_1 \times \mathbf{F}_1 = (-2\mathbf{i} - 2\mathbf{j}) \times (15\mathbf{i} - 12\mathbf{j}) = 24\mathbf{k} + 30\mathbf{k} = 54\mathbf{k}$   
Change to:  $\mathbf{M}_2 = \mathbf{r}_2 \times \mathbf{F}_2 = (0\mathbf{i} - 2\mathbf{j}) \times (2\mathbf{i} + \mathbf{j}) = 4\mathbf{k}$   
Change to:  $\mathbf{M} = \mathbf{M}_1 + \mathbf{M}_2 + 20\mathbf{k} = 54\mathbf{k} + 4\mathbf{k} + 20\mathbf{k} = 78\mathbf{k}$
20. P.106, No. 6.4(C):  $60\mathbf{k} \rightarrow -20\mathbf{k}$
21. P.110, No. 6.22(A) and (B): 3  $\rightarrow$  3/2 4  $\rightarrow$  3
22. P.113, No.6.22:  $x_c = \frac{3}{32} \int_0^4 \frac{x}{2} x dy = \frac{3}{32} \int_0^4 2y dy = \frac{3}{32} \cdot 4^2 = 3/2$
23. P.111, No. 6.4: Change to:  $\mathbf{M}_1 = 2\mathbf{i} \times (3\mathbf{i} - 4\mathbf{j}) = -8\mathbf{k}$ ,  $\mathbf{M}_2 = (-2\mathbf{i} + 4\mathbf{j}) \times (6\mathbf{i} + 4\mathbf{j}) = -32\mathbf{k}$ ,  
 $\mathbf{M} = -8\mathbf{k} - 32\mathbf{k} + 20\mathbf{k} = -20\mathbf{k}$
24. P.115, above eq. 7.1:  $a_0 \rightarrow a$
25. P.119, Example 7.6: Example 7.4  $\rightarrow$  Example 7.5 and Eq.7.7  $\rightarrow$  Eq.7.8
26. P.122, Example 7.9: Line 1: 200-N  $\rightarrow$  100-kg. Also, delete the last word “downward”
27. P.141, Example 8.6, bottom of page:  $(2' 400)' 6 \text{ \textcircled{R}} (4' 200)' 6$
28. P.143, Example 8.9: 4000 N  $\rightarrow$  400 N and 3200 N·m  $\rightarrow$  320 N·m
29. P.150, No.8.17: ... at the location ...  $\rightarrow$  ... to the left...
30. P.150, No.8.17: ... where it is 400 N.  $\rightarrow$  ... where it is 800 N.
31. P.150, No.8.17, in the equation: 400  $\rightarrow$  800 and 67 900 N  $\rightarrow$  135 800 N
32. P.161, Example 9.11: 0.22  $\rightarrow$  0.2
33. P.162, last line: Eq.9.41  $\rightarrow$  Eq. 9.43
34. P.301, No. 98: 1.5  $\rightarrow$  3.5
35. P.316, No. 56(B):  $9.21 \times 10^8 \rightarrow 4.7 \times 10^9$
36. P.329, No. 98: ... 4500 psi.  $\rightarrow$  ... 4500 psi, after 180 days of curing time.
37. P.338, No. 58: 234 MPa  $\rightarrow$  58.5 MPa.