

**Errata and Edits** for *A Heat Transfer Textbook*, 5<sup>th</sup> ed. (as of December 2, 2020). These apply to the print edition (Dover Publications, 2019, ISBN 978-048683735-2) and the ebook version 5.00.

Page 19, eqns. (15) and (16): change sign of lefthand side of both equations

Page 24, line 2b: delete “ $c =$ ”

Page 25, Fig. 1.12: “gas temperature” should be “initial temperature difference”

Page 39, Prob. 1.9: answer is “1125 J” (not 1123)

Page 43, Prob. 1.28: change “2,257,000” to “2,450,000”

Page 44, Prob. 1.33: answer is “ $-270 \text{ W/m}^2$ ” (not 270)

Page 49, line 3b: should read “heat conduction, or heat diffusion, equation...”

Page 68, 2<sup>nd</sup> equation: change sign of the righthand side to have  $-kC_1/r_o$

Page 91, Prob. 2.23: change “firebrick” to “facing brick”; answer is  $40^\circ\text{C}$  (not 460)

Page 92, Prob. 2.32: answer is “ $7.21 \times 10^6 \text{ kJ/h}$ ” (not  $7.12 \times 10^6$ )

Page 94, Prob. 2.42: Change “50” to “1.5” and change “99.66%” to “89%”

Page 96, Prob. 2.46(e): Change “reduce” to “increase”

Page 100, Fig. 3.1: “exhaust” should be “compressor air” and “kitchen” should be “refrigerator”

Page 100, line 9b: “3.7” should be “3.7b”

Page 112, line 7: Change “ $T_{h_{out}}$ ” to “ $T_{c_{out}}$ ”

Page 132, Prob. 3.18: answer is “ $76.85^\circ\text{C}$ ” (not 75.09)

Page 132, Prob. 3.20: answer is “ $135.7^\circ\text{C}$ ” (not 140.5)

Page 135-6, Prob. 3.41: The latent heat should be “ $23.1 \text{ kJ/kg}$ ” (not 850). This problem has been rewritten in Version 5.10.

Page 178, unnumbered equation:  $x = dx$  should be  $x + dx$

Page 261, Prob. 5.42: melting temperature should be “ $60^\circ\text{C}$ ” (not 40)

Page 264, Prob. 5.52b:  $\tau$  should be  $T$  in the equation.

Page 311, eqn. (6.71): Change “0.453” to “0.4587”

Page 313, eqn (6.75): Sign of leftmost term should be “-”

Page 320, line 7b: “(6.88)” should be “(6.87)”

Page 328, line 16: “viscosity” should be “Prandtl number”

Page 329, line 1 and legend of figure: “4.1” should be “4.3”

Page 333, eqn. (6.124): The last term should be: “ $\frac{1}{c}(0.0296 \text{ Re}_u^{0.8} \text{ Pr}^{0.6} - 0.332 \text{ Re}_l^{1/2} \text{ Pr}^{1/3})$ ”

Page 335, Example 6.9 solution: The previous correction should be carried into the example, leading to these changes:  $\overline{\text{Nu}}_L = 1,435$ ,  $\bar{h} = 18.82 \text{ W/m}^2\text{K}$ ,  $Q = 752.8 \text{ W}$ .

Page 399, Prob. 7.15: tube temperature should be “ $30^\circ\text{C}$ ” (not 27)

Page 399, Prob. 7.16, last line: “0.5 mm” should be “0.4 mm”

Page 399, Prob. 7.17: The relative roughness should be “ $\varepsilon/D = 0.002$ ” (not 0.0006) and the answer should be “ $h = 394 \text{ W/m}^2\text{K}$ ”.

Page 418, eqn. (8.13b): The subscript “ $D$ ” should be “ $L$ ” on both Nu and Ra.

Page 418, eqn. (8.13b): The exponent  $1/6$  should apply only to  $Ra$ , not to the entire expression in square brackets.

Page 418, last line:  $\beta$  should also be evaluated at  $T_f$ .

Page 456, Problem 8.13: Use  $\varepsilon = 0.9$ ; the answer should be “4.59 W/m<sup>2</sup>K” (not 1.9)

Page 459, Problem 8.37: Use  $\varepsilon = 0.7$ ; the answer should be “25.8 W” (not 10.5)

Page 602, Problem 10.10: Answer should be “0.087” (not 0.145).

Page 743, second entry for  $c$ : Replace “ $c$ ” by “ $c_i$ ”