

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 W/m^2 ” (not 270)

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

Page 68, 2nd 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°C (not 460)

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

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°C ” (not 75.09)

Page 132, Prob. 3.20: answer is “ 135.7°C ” (not 140.5)

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

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

Page 180, second equation: $(0.04 - 0.15)^3$ should be $(0.04 - 0.015)^3$

Page 237, line 11b: “three” should be “four”.

Page 244, lines 14b–12b: The interior and exterior shape factors are equal for regular polygons, not for arbitrary shapes.

Page 256, Problem 5.22: The answer for (c) is $S_c \approx 0.588$; S_d is substantially greater than S_c , but difficult to compute accurately as a result of the exterior corners.

Page 259, Prob. 5.27: For (b), T_{sfc} should be “ 216°C ” (not 200); for (c), T_{sfc} should be “ 259°C ” (not 255)

Page 261, Prob. 5.42: melting temperature should be “ 60°C ” (not 40)

Page 264, Prob. 5.52b: τ should be T in the equation.

Page 264, Prob. 5.53: “eqn. (5.13)” should be “eqn. (5.14)”

Page 265, Prob. 5.56b: “a wire” should be “a wire of radius δ ”

Page 265, Prob. 5.61: solve this problem for a fixed position and take $r/r_o = 1$.

Page 307, eqn. (6.62): Change “0.565” to “0.564”

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: $\overline{\text{Nu}}_L = 1,435$, $\overline{h} = 18.82 \text{ W/m}^2\text{K}$, $Q = 752.8 \text{ W}$.

Page 339, Prob. 6.18: “eqn. (6.115)” should be “eqn. (6.114)”

Page 399, Prob. 7.15: tube temperature should be “30 °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 405, Prob. 7.47, 2nd para., line 5: “20 cm” should be “20 mm”.

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: β should also be evaluated at T_f .

Page 456, Problem 8.13: Use $\varepsilon = 0.9$; the answer should be “4.59 W/m²K” (not 1.9)

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

Page 472, line 1: Change “like operate” to “like to operate”

Page 496, Fig. 9.12: In the ordinate label $\sqrt{g \cdots}$ should be $\sqrt[4]{g \cdots}$.

Page 526, Problem 9.17: Line 1, “...of position z ...”; line 2, “Set $z = 0$ where...”

Page 528, Problem 9.34: The last term on the right-hand side should be $4q_w L / GDh_{fg}$.

Page 529, Problem 9.36: “Sect.” should be “Table”.

Page 580, eqn. (10.45): The right-hand side of the equation should be: $\cdots = \sum_{j=1}^n (A_i \delta_{ij} - A_i F_{i-j}) \sigma T_j^4$.

Page 590, line 12b: Change “hydrogen” to “oxygen”.

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

Page 638, last line: Change “Problem 10.53” to “Problem 11.53”.

Page 641, Example 11.7, line 2: “species 1” should be “species 2”.

Page 642, Example 11.8, line 5: “species 1” should be “species i ”.

Page 652, line 2: “density” should be “concentration”.

Page 690, lines 2-3: A more accurate value of A is $A = 2.9 \times 10^9 \text{ kmol/m}^2\text{s}$. With that value, the answer to (b) changes to 2.03 g/m²s and the answer to (d) changes to 5.58 g/m²s. Also, in part (b), “ethane” should be “methane”.

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