

# Errata *Solution Manual to Accompany Game Theory: An Introduction*, Second Edition

1. Page 3, Solution to Problem 1.6, the tree branch labeled Fire should have payoffs -1, 1, not -1,0.
2. Page 15, Problem 1.32(a), "probability" should be "expectation."
3. Page 24, Solution to Problem 1.44(b), 3000 should be replaced by 3500.
4. Page 31, Solution to Problem 2.11(d), "Then player I has row 2 dominated by row 1." not column 1.
5. Page 35,  $a_{12}$  in the second row of the matrix in Problem 2.19 should be  $a_{22}$ . In the solution to Problem 2.19(b)  $J_5$  should be  $J_4$ .
6. Page 50, Problem 2.36, line 4, instead of  $(0.9)(35)$  should be  $(0.1)(35)$ .
7. Page 50, Problem 2.37, line -10, should have  $X^*=(0.43,0.086,0.152,0.326,0,0,0)$ . A period should be a comma after 0.086.
8. Page 55, Problem 2.42, line 8, should be  $(+1)(1/2)+(1/2)(1/2)=1$ .
9. Page 57, Problem 2.44 (line -11 thru -13) should have  $Y^*=(1/2,1/2)$ , not  $Y^*=(7/22,15/22)$ .
10. Page 59, Problem 2.46(b), the  $8/2$  in the matrix should be  $9/2$  and the  $11/2$  in row 2 should be  $9/2$ .
11. Page 60, Problem 2.46(c), line 6,  $3-p \leq 2+2p$  implies  $p \geq 1/3$ , not 1. All 4 lines intersect only if  $p=1$ .
12. Page 63, Solution to problem 2.56 should be False.
13. Page 68, Problem 3.6(b), line -10,  $k$  should be  $k+1$ .
14. Page 69, Problem 3.8(a), remove bar over 2 in entry 2,2.
15. Page 73, Problem 3.13 in BR for  $y$ , delete 0 in  $0 \ 2/9$  when  $y=1$ .
16. Page 74, Problem 3.15(b), line -1,  $D_B$  should be  $D-B$ .
17. Page 101, Solution to Problem 4.1, line -1, should have "(0,3) is also a pure Nash Equilibrium."
18. Page 111, Solution to Problem 4.12(b), the -4,4 entry in  $1K1A \rightarrow 2K \rightarrow B$  should be 4,-4. All branches for player 2 with Fold should have  $6/7$  probability and all branches for player 2 with Bet should have  $1/7$  probability.
19. Page 132-133, Solution to Problem 5.6(c), line -1 on p.132,  $F(R)$  should be  $N F(R)$ ; page 133, line 5, formula for  $R^s$  should be  $(N-1)^2$ ; line 8,  $F(R^s)$  should be  $N F(R^s)$ .
20. Page 146, Problem 5.21, line 9,  $\leq 1,950,000$  should be  $\geq 1,950,000$ .
21. Page 148, Problem 5.22(b), line 8,  $(1,1)$  should be  $(1,0)$ ; line 9,  $x_0 \leq y_0$  should be  $x_0 + y_0 \leq 1$ ; line 11, "Find..." should be "If possible find..."; line-8, delete  $\frac{1}{2}$  before  $x \ y; u$  should be  $u_1$  in this paragraph and on page 149. On Page 149, line 6,  $0 \leq y \leq \frac{1}{2}$ , should be  $\frac{1}{2} \leq y \leq 1$ . Add the sentence "Something is definitely wrong." ; line -5, replace "The Nash equilibrium..." with "A pure Nash equilibrium does not exist."
22. Page 168, Problem 6.4(a), line 8,  $x_2 + x_3 \leq 0$ , should be  $x_2 + x_3 \geq 0$ .
23. Page 172, Problem 6.12, line 9, 150,000 should be 150, and line 10, 138 should be 135.
24. Page 173, Problem 6.16, line-10, - should be +.
25. Page 174, Problem 6.18, line 5,  $e(S,x) \leq 0$ .

26. Page 179, Problem 6.27, line 13,  $\xi_3$  should be  $x_3$ .
27. Page 180, Problem 6.28, line 17, Case 13 should be Case 4; lines 21-23,  $y$ 's should be  $x$ 's.
28. Page 181, Problem 6.29, line 13,  $105.5-\epsilon$  should be  $105.5+\epsilon$ ; line 17,  $-70.75$  should be  $-7.75$  ; line 19,  $e(23,x)=65-72.75=-7.75$
29. Page 188, Problem 6.38, fractions in bottom of the two tables giving the Shapley value should be switched.
30. Page 191, Problem 6.41(a), line 5,  $x_2 \geq 0$  should be  $x_3 \geq 0$ .
31. Page 250, line -9,  $v(i_k)$  should be dropped from the formula for  $x_i$  and  $-2$  should be  $+2$ .