## Corrections and updates for ninth printing of Osborne and Rubinstein's "A Course in Game Theory" (MIT Press, 1994)

## 2024/2/27

We thank the following people for pointing out errors and improvements: Tim van Eck, Peter Forsyth, Satoshi Fukuda, Jean-Jacques Herings, Christopher Kah, Karthik Kalyanaraman, Nicolas Klein, Hui Li, Robert Murphy, Yasuyuki Noguchi, Marc Pauly, To Son.

## Corrections

$Page,\ Line$	Correction
XV	Ariel Rubinstein's email address is now rariel@tauex.tau.ac.il, his
	website is https://arielrubinstein.tau.ac.il, and his second ad-
	dress is Department of Economics, New York University, New York, NY

- 7, -13 Insert "nonempty" before "disjoint".
- 45, 7 Replace "he" with "she".

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- 50, -2 Replace " $0 < \gamma < 1$ " with " $0 < \gamma < 1$ ".
- 60, 22 Replace "player 1" with "player i".
- 60, 23 Replace " $U_i(a_{-i}, a_i^*)$ " with " $u_i(a_{-i}, a_i^*)$ ".
- 68, -2 Add "infinite" before "decimal". (A number has a unique infinite decimal expansion.)
- 99, 3 Replace "the longest" with "a longest".
- 99, 4 Replace  $\Gamma(h^*)$  with  $\Gamma(h', h^*)$  on this line and on lines 6, 8, and 10.
- 104, -9, -8 Replace "she" with "he".
  - Add to A3 the requirement that the Pareto frontier of X be connected.
  - In the first display  $(M_i(G_i))$  replace "a SPE" with "an SPE".
  - Replace the second sentence of the proof of Step 1 with "By A3 and the continuity of the preference relations, the domain of  $\phi$  is an interval and  $\phi$  is continuous, one-to-one, and decreasing."
  - 138, 1 (except printings 1–3) Change upper limit of sum from T to  $\infty$ .
  - 138, 9 Replace t with T (twice).
  - 143, -6 In printings 4 and later replace "A payoff profile w" with "A feasible payoff profile w of G". (Note that, according to our definitions, a feasible payoff profile may not be a payoff profile.)
    - In Proposition 144.1, replace "an enforceable payoff profile of G" with "an enforceable convex combination of payoff profiles of G". [The coefficients in the convex combination are not necessarily rational.]

- 159–160 The sketch of the proof of Proposition 160.1 is flawed. It has been replaced. (The text has been rewritten, moving the result to page 159, where it appears as Proposition 159.1.)
- 200, -11 Replace "after the history h" with "after the history h if  $P(h) \in N$  and chance if P(h) = c."
- 215, 5 Replace "the sets of actions" with "the sequences of actions".
- 216, -6 Replace the mathematical expression with  $p^2 \cdot 0 + p \cdot (1-p) \cdot 1 + (1-p) \cdot 0 = p(1-p)$ .
  - 229 In the sixth line of Exercise 229.1, replace "S" with "s".
  - 260 After "for all coalitions S and T" on the last line add ", where  $v(\emptyset) = 0$ ".
  - On line 12, insert "for all  $S \in \mathcal{C}$ " before "by the left-hand inequality", and replace the last sentence of this paragraph with "Thus x(N) = v(N), so that the payoff profile x is in the core."
- 307, 7–8 Replace  $\succsim_1'$ ,  $\succsim_2$  with  $\succsim_i'$ ,  $\succsim_j$  (twice).
- 307, 15 Replace  $p \cdot x \succsim_j x^*$  with  $p \cdot x \succ_j x^*$ .
  - 327 Replace "Recherce" with "Recherche" on line -10.