## **Review**

## 1 Important concepts

- 1. Player, strategy, payoff
- 2. Dominated strategy, dominant strategy
- 3. Best responses
- 4. Pure strategy, mixed strategy
- 5. Nash equilibrium (NE)
- 6. Games of perfect/imperfect information
- 7. Pure strategy in a dynamic game
- 8. Subgame-perfect equilibrium (SPE)
- 9. Repeated games
- 10. Games of complete/incomplete information
- 11. Type, belief
- 12. Bayesian Nash Equilibrium (BNE)
- 13. Perfect Bayesian Equilibrium (PBE)

## 2 Methods for solving problems

- 1. Iterated elimination of strictly dominated strategies
- 2. NE
  - Pure-strategy NE: for discrete strategies, underline the best responses; for continuous strategies, use first-order conditions

- Mixed-strategy NE: use the indifference conditions
- 3. Backward induction, SPE
- 4. One-shot deviation principle in infinitely repeated game
- 5. BNE (type, belief, Bayesian updating)
- 6. PBE (guess and verify)