CRACKING THE MYSTERY
OF WEAK DOMINANCE

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Abstract

An informal argument shows that common knowledge of rationality implies the iterative elimination of strongly dominated strategies. Rationality here means that players do not play strategies that are strongly dominated relative to their knowledge. We formalize and prove this claim. When by rationality we mean that players do not play strategies that are weakly dominated relative to their knowledge, then common knowledge of rationality does not imply iterative elimination of weakly dominated strategies. We show that it does imply an iterative elimination of *flaw* of weakly dominated strategies. The iterative elimination of flaws of strongly dominated strategies coincides with the iterative elimination of strongly dominated strategies.