		Field Cruiser: Reliability	Field Cruiser: Power
Nice Ride	Safety	$10 million, $28 million	$32 million, $35 million
	Comfort	$30 million, $40 million	$25 million, $20 million

3. Nice Ride and Field Cruiser are the only two producers of vehicles. Nice Ride is deciding whether to improve Safety or Comfort. Field Cruiser is deciding whether to improve Reliability or Power. The payoff matrix shows the payoffs for each combination of strategies. The first entry in each cell shows Nice Ride's profit, and the second entry shows Field Cruiser's profit. Each firm independently and simultaneously chooses its strategy. Assume the two firms know all the information in the matrix and do not cooperate.

   (a) What is Field Cruiser's most profitable strategy if Nice Ride chooses to improve Safety?

   (b) Does Nice Ride have a dominant strategy? Explain using numbers from the payoff matrix.

   (c) Is Nice Ride choosing to improve Safety and Field Cruiser choosing to improve Power a Nash equilibrium? Explain using numbers from the payoff matrix.

   (d) Suppose Nice Ride and Field Cruiser decide to merge to maximize combined profits and choose to keep producing both Nice Ride and Field Cruiser vehicles. Assuming the values in the payoff matrix do not change, what would be the new firm's total profit?

   (e) Suppose instead that a change in fuel prices reduces the profitability of choosing to improve Power by $10 million for Field Cruiser. Identify each firm's profit at the Nash equilibrium.

Begin your response to this question at the top of a new page in the separate Free Response booklet and fill in the appropriate circle at the top of each page to indicate the question number.

STOP

END OF EXAM