Problem 1

Answer: What is best for you depends on what others do.

Problem 2

Answer: B, D and F
▷ (B) Players
▷ (D) Strategies
▷ (F) Payoffs

Problem 3

Answer: If we just assume that each player maximizes his/her payoff, we fail to pin down how each one anticipates the other players' behaviors.

Problem 4

Answer: You choose the best available option.

Problem 5

Answer:
▷ Players are making mutual best replies.
▷ No players can increase their payoffs by deviating by themselves.

Problem 6

Answer: 75

In the first case (before the construction of the bypass), the Nash equilibrium corresponds to the following situation:
▷ 25 drivers choose the road of length 350;
▷ 125 drivers choose the road of length 250.
Then the traveling time for both roads is the same: $350 + 25 = 250 + 125 = 375$.
In the second case (after the construction of the bypass), the Nash equilibrium corresponds to the following situation:
▷ no driver chooses the road of length 350;
▷ 50 drivers choose the road of length 250;
▷ 100 drivers choose the road of length 200.
Then the traveling time becomes $50 + 250 = 100 + 200 = 300$. This means the traveling time goes from 375 to 300. Therefore, this time decreased by 75.

Problem 7

Answer: He found a unified solution concept that can be applied to a wide range of games.