$S_1 = \{H, L\}$ and $S_2 = \{X, Y\}$

IF 1 plays H, Payoff = Z. Player 1 Payoff = $U_1(L, X) = 0$
$U_1(L, Y) = 10$

Player 2 Payoff doesn't matter

a)

Player 1

	Player 2	
	X	Y
H	Z, 0	Z, 1
L	0, 1	10, 0

b) IF 1 believes $\theta_2 = (.5, .5)$, Payoff of playing H? Playing L? Value of Z when H = L?

Payoff for H = .5 Z
Payoff for L = 10 · .5 = 5

Player 1 is indifferent when Z = 5

c) $\theta_2 = (\frac{1}{3}, \frac{2}{3})$. Payoff of Player 1 Playing L?

$= \frac{1}{3} \cdot 0 + 10 \cdot \frac{2}{3} = 0 + 20/3 = 20/3$