

Passed Solution review

$$S_1 = \{H, L\} \text{ and } S_2 = \{x, y\}$$

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 $H = L$?

$$\text{Payoff for H} = .5z$$

$$\text{Payoff for L} = 10 \cdot .5 = 5$$

Player 1 is indifferent when $z = 5$

c) $\theta_2 = (\frac{1}{3}, \frac{2}{3})$. Payoff of Player 1 Playing L?
 $= \frac{1}{3} \cdot 0 + 10 \cdot \frac{2}{3} = 0 + \frac{20}{3} = \frac{20}{3}$