Problem 6

$$\max Z = 0.09x_1 + 0.15x_2$$

Constraint $= 0.09x_1 + 0.15x_2 \geq 60,000$

$$0.5x_1 + 0.8x_2 \leq 30,000$$

$$0.09x_1 + 0.15x_2 - S_1 \geq 60,000$$

$$0.5x_1 + 0.8x_2 + S_2 = 30,000$$

	x_1	x_2	S_1	S_2	b
S_1 0	0.09	0.15	-1	0	60000
S_2 0	0.5	0.8	0	1	30,000
	0	0	0	0	x
S_1 0	-0.0035	0	-1	-0.1875	54375
x_2 0.15	0.625	1	0	1.25	37500
	0.09375	0.15	0	0.1875	5625
x_1 0.09	1	0	2666	30	-14500000
x_2 0.15	0	1	1666.25	31.25	9100000
	0.09	0.15	273.935	9.1875	60000

Here the return is decreasing and money can't be −ve hence this lpp is not solveable