

## Waiting Line Systems Exercises

4. Replicate the economic analysis example (St. Luke's) from the ppt lecture notes. Use the "Econ analysis" worksheet in the workbook (queueing examples template) available on the web site.

Note: use a data table to conduct this analysis. Then graph results.

### Solution:

		2 Servers	3 Servers	4 Servers
10				
11				
12	Cost of Waiting / hour	\$ 3,072.00	\$ 1,448.00	\$ 1,648.00
13	0	\$ 800.00	\$ 1,200.00	\$ 1,600.00
14	20	\$ 1,254.40	\$ 1,249.60	\$ 1,609.60
15	40	\$ 1,708.80	\$ 1,299.20	\$ 1,619.20
16	60	\$ 2,163.20	\$ 1,348.80	\$ 1,628.80
17	80	\$ 2,617.60	\$ 1,398.40	\$ 1,638.40
18	100	\$ 3,072.00	\$ 1,448.00	\$ 1,648.00
19	120	\$ 3,526.40	\$ 1,497.60	\$ 1,657.60
20	140	\$ 3,980.80	\$ 1,547.20	\$ 1,667.20
21	160	\$ 4,435.20	\$ 1,596.80	\$ 1,676.80
22	180	\$ 4,889.60	\$ 1,646.40	\$ 1,686.40
23	200	\$ 5,344.00	\$ 1,696.00	\$ 1,696.00

