QUEUEING MODEL FOR SINGLE SERVER

						S.End T - Arrival.T	T.A.T - Service T	Start T-Arrival	End T- Start T
Cust No.	I.A.T	Arrival	Service Time	S.Start Time	S.End Time	T.A.T Cust spend in the Mart	Wait Time queue	Response Time	Server Utilization
1	***	0	5	0	5	5	0	0	5
2	2	2	7	5	12	10	3	3	7
3	5	7	12	12	24	17	5	5	12
4	1	8	8	24	32	24	16	16	8
5	3	11	7	32	39	28	21	21	7
6	1	12	7	39	46	34	27	27	7
7	2	14	6	46	52	38	32	32	6
8	1	15	15	52	67	52	37	37	15
9	0	15	13	67	80	65	52	52	13
10	0	15	11	80	91	76	65	65	11
11	0	15	11	91	102	87	76	76	11
12	0	15	10	102	112	97	87	87	10
13	0	15	6	112	118	103	97	97	6
14	2	17	7	118	125	108	101	101	7
15	0	17	8	125	133	116	108	108	8
16	3	20	15	133	148	128	113	113	15
SUM	20		148			988	840	840	148

	ANSWERS	FORMULA
AVERAGE TIME CUST SPEND IN THE MART	61.75	T.A.T/NO.CUST
AVERAGE WAIT TIME	52.5	∑W.T/NO.CUST
RESPONSE TIME	52.5	∑RESPONSE/NO. CUST
MEAN SERVICE TIME S!	9.25	∑SERVICE T/NO. CUST
THE AVERAGE TIME B/W THE ARRIVAL OF CUST	1.33333333	∑I.A.T/NO. CUST -1
AVERAGE WAITING TIME OF THOSE WHO WAIT	56	∑WAIT.T.Q/NO.CUST WHO WAIT
SERVER UTILIZATION RATE	100	∑SERVER.BUSY/SERVICE TIME