Table 5-2. Call Arrival Rates (Calls Per Hour)

Time	Rate	Time	Rate	Time	Rate	Time	Rate
8:00 - 8:30	20	10:30 - 11:00	75	1:00 - 1:30	110	3:30 - 4:00	90
8:30 - 9:00	35	11:00 - 11:30	75	1:30 - 2:00	95	4:00 - 4:30	70
9:00 - 9:30	45	11:30 - 12:00	90	2:00 - 2:30	105	4:30 - 5:00	65
9:30 - 10:00	50	12:00 - 12:30	95	2:30 - 3:00	90	5:00 - 5:30	45
10:00 - 10:30	70	12:30 - 1:00	105	3:00 - 3:30	85	5:30 - 6:00	30

Next let's take a look at our staffing. Although our initial model assumed constant staffing levels for our sales and technical-support areas, the staffing level actually varies over the day. It turns out that there are six sales people with the staggered daily schedules summarized as (number of people @ time period in minutes): 1@60, 3@60, 4@90, 5@60, 6@60, 5@90, 6@90,5@30, 3@60, and 2@60.

Our technical support employees work an eight-hour day with 30 minutes off for lunch (lunch is not included in the eight hours). There are 11 technical support people whose work schedules are shown in Table 5-3. Charity and Noah are only qualified to handle calls for product Type 1; Tierney, Aidan, and Emma are only qualified to handle calls for product Type 2; Shelley, Jenny, and Christie are only qualified to handle calls for product Type 3. Molly is qualified to handle product Types 1 and 3, and Anna and Sammy are qualified to handle calls for all three product types.

The last bit of detail that we omitted from our initial model was that four percent of technical calls require further investigation after completion of the phone call. The questions raised by these callers are forwarded to another technical group, outside the boundaries of our model, that prepares a response. The time to prepare these responses is

Table 5-3. Technical Support Schedules

Name	Product Lines	Time Period (30 minutes)																					
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Charity	1	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•					
Noah	1						•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•
Molly	1, 3			•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•			
Anna	1, 2, 3					•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	
Sammy	1, 2, 3				•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•		
Tierney	2	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•					
Aidan	2						•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•
Emma	2				•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•		
Shelley	3	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•					
Jenny	3						•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•
Christie	3				•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•		