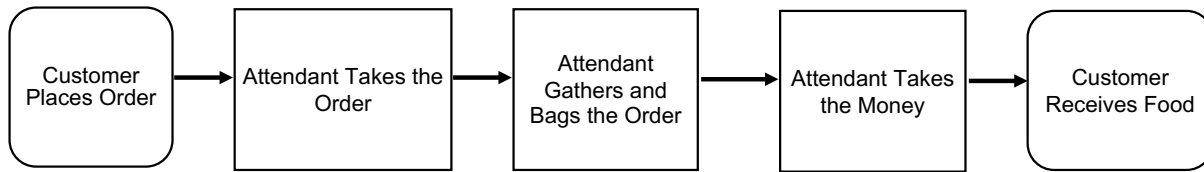
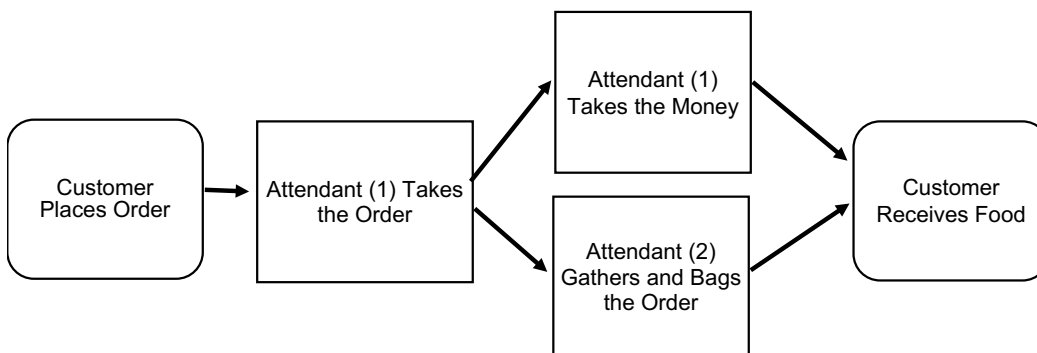


**Part a**

Process Step	Minimum Cycle Time (Seconds)	Longest Cycle Time (Seconds)
Customer Places Order		
Attendant Takes the Order	30	40
Attendant Gathers Food	30	120
Attendant Takes the Money	30	40
Customer Receives Food		
<b>Total Cycle Time:</b>	<b>90</b>	<b>200</b>

**Part b**

Process Step	Minimum Cycle Time (Seconds)	Longest Cycle Time (Seconds)
Customer Places Order		
Attendant Takes the Order	30	40
One Attendant Gathers Food While Other	30	120
Attendant Takes the Money		
Customer Receives Food		
<b>Total Cycle Time:</b>	<b>60</b>	<b>160</b>

Potential problems that could arise by splitting the process across two individuals include introducing communication issues that cause some orders to be wrong, space constraints of two attendants working in the same space, and lower utilization while one attendant waits on the other to complete his or her task.

TIME WAITING IN LINE	TIME HAVING EYES TESTED	TIME HAVING PICTURE TAKEN	PERCENT VALUE- ADDED TIME
45	2	3	10.0%

The key assumption here is that time spent waiting offers no value. In other words, if a person could enter the license bureau and immediately have his eyes checked and picture taken, he could be out the door in 5 minutes.

a.)

RIDE	AVERAGE WAITING TIME	LENGTH OF RIDE	TOTAL PROCESS TIME	PERCENT VALUE- ADDED TIME
Magical Mushroom	30	10	40	25.00%
Haunted Roller Coaster	40	5	45	11.11%
<b>Total:</b>	<b>70</b>	<b>15</b>	<b>85</b>	<b>17.65%</b>

b.)

RIDE	AVERAGE WAITING TIME	LENGTH OF RIDE	TOTAL PROCESS TIME	PERCENT VALUE- ADDED TIME
Magical Mushroom	30	10	40	25.00%
Haunted Roller Coaster	0	5	5	100.00%
<b>Total:</b>	<b>30</b>	<b>15</b>	<b>45</b>	<b>33.33%</b>