

**Customers**

**Roll one die  
Pass that number of  
chips to the *Mailroom*  
Inbox**

Shortcut:  
 Total WIP (new) =  
 Total WIP (previous)  
 + New Invoices  
 - Invoices Complete

DAY	New Invoices Put Into the Process	Invoices Completed (Archive-Done)	Total WIP
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
A Totals			A1
B Invoices per day = $A1/20$			A2
C Utilization = $B/3.5$			
D Average WIP = $A2/20$			
E Average cycle time = $D/B$			

# Mailroom Inbox



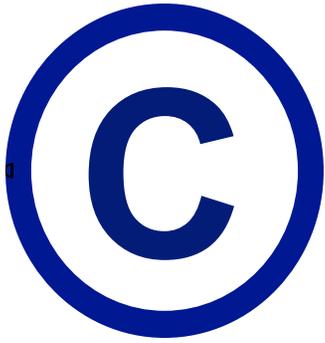


**Mailroom**

**Roll one die  
Pass that number of chips (if you have them) from your Inbox to the *PFR Check* Inbox**

DAY	Invoices Completed	WIP
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
<b>A Total Invoices Completed</b>		
<b>B Invoices per day = <math>A/20</math></b>		
<b>C Utilization = <math>B/3.5</math></b>		
<b>D Ending WIP</b>		
<b>E Estimate cycle time = <math>D/B</math></b>		

# PFR Check Inbox

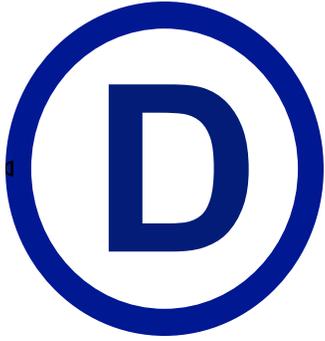


**PFR Check**

**Roll one die  
Pass that number of chips (if you have them) from your Inbox to the *Analyst* Inbox**

DAY	Invoices Completed	WIP
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
<b>A Total Invoices Completed</b>		
<b>B Invoices per day =A/20</b>		
<b>C Utilization =B/3.5</b>		
<b>D Ending WIP</b>		
<b>E Estimate cycle time =D/B</b>		

# Analyst Inbox

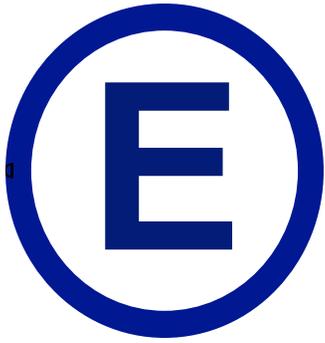


# Analyst

**Roll one die  
Pass that number of chips (if you have them) from your Inbox to the *Pay* Inbox**

DAY	Invoices Completed	WIP
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
<b>A Total Invoices Completed</b>		
<b>B Invoices per day =A/20</b>		
<b>C Utilization =B/3.5</b>		
<b>D Ending WIP</b>		
<b>E Estimate cycle time =D/B</b>		

# Pay Inbox



**Pay**

**Basic: Roll one die  
Pass that number of chips  
(if you have them) from  
your Inbox to *Archive -  
Done***

DAY	Invoices Completed	WIP
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
<b>A Total Invoices Completed</b>		
<b>B Invoices per day =A/20</b>		
<b>C Utilization =B/3.5</b>		
<b>D Ending WIP</b>		
<b>E Estimate cycle time =D/B</b>		

# Archive - Done



MIT OpenCourseWare  
<http://ocw.mit.edu>

16.660J / ESD.62J / 16.853 Introduction to Lean Six Sigma Methods  
IAP 2012

For information about citing these materials or our Terms of Use, visit: <http://ocw.mit.edu/terms>.