

580_HW3

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```
#1  $p(1) = 0.1, p(2) = 0.3, p(3) = 0.3, p(4) = 0.2, p(5) = 0.1$   
#(c)  $Pr(1.4 \leq X \leq 4.2)$   
p = 0.3+0.3+0.2  
p
```

```
## [1] 0.8
```

```
#(d)  $Pr(1.4 < X < 4.2)$   
p = 0.3+0.3+0.2  
p
```

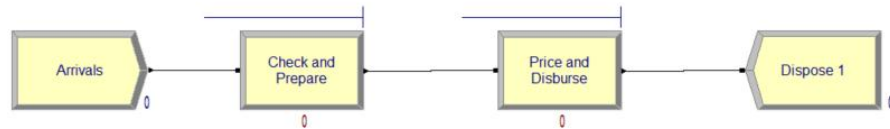
```
## [1] 0.8
```

```
#(f)  $Var(X)$   
E = 0.1*1+0.3*2+0.3*3+0.2*4+0.1*5  
Var = 0.1*1+0.3*4+0.3*9+0.2*16+0.1*25 - E^2  
Var
```

```
## [1] 1.29
```

HW3_2 model

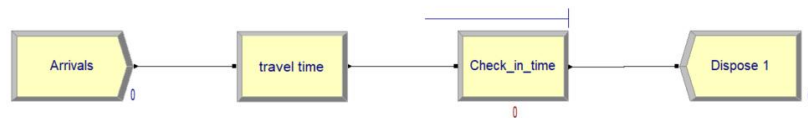
Seeds
Seed 1



Model	WIP	Total Time	Waiting Time	Number Processed	Avg Utilization
3_2	12.39	16.08	11.98	117	0.78
3_3	4.61	5.38	1.33	135	0.87
hw3_2	4.95	6.07	2.17	130	0.80

HW3_3 model

Seeds
Seed 1



Average Total Time(hours)	Numbers of completing check-in	Length of Q
0.21	593	1.99