

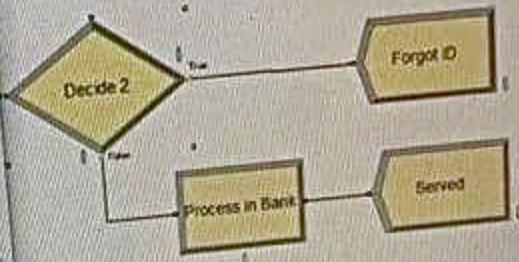
If this part of the Bank model has an error, what is it?

Decide

Name	Type
Decide 2	2-way by Chance

Percent True (0-100):
5%

OK Cancel Help



- a. Dispose modules should be swapped
- b. Has no error
- c. The Type should be 2-way by condition
- d. The percentage should be 95%

Create

Name: Customers Arrival Entity Type: Customer

Time Between Arrivals

Type	Expression	Units
Expression	EXP0(5)	Hours

Entities per Arrival: Var1 Max Arrivals: Var2 First Creation: 420

OK Cancel Help

Here is a reminder of the problem

Customers arrive with Expo(5) minutes to a Bank opens at 8:00 am and closes its doors at 3:00 pm (does not allow anyone in). However, the customers who are already in the Bank will continue to be served and leave through another door. The Bank will not shut down until all customers are flushed out (given it is 3:00 pm or after). There is just one process in this system that needs one of the 2 workers available to work on it. Incoming customers have the chance of 5% to not going through the process since they forgot their I.D. The process takes TRIA(2.5,10) minutes.

a. One

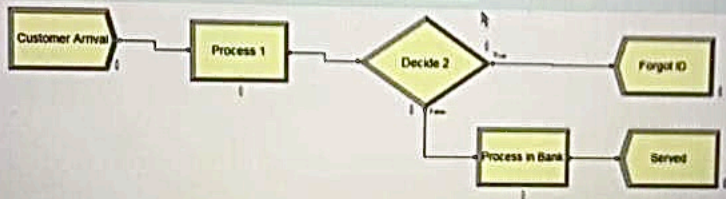
b. Two

c. Three

d. Four

For the following problem, a suggested model is shown in the screenshot below. Answer the following questions about this model and solved the system. There are errors in this model.

Customers arrive with Expo(5) minutes to a Bank opens at 8:00 am and closes its doors at 3:00 pm (does not allow anyone in). However, the customers who are already in the Bank will continue to be served and leave through another door. The Bank will not shut down until all customers are flushed out (given it is 3:00 pm or after). There is just one process in this system that needs one of the 2 workers available to work on it. Incoming customers have the chance of 6% to not going through the process since they forgot their I.D. The process takes TRIA(2,5,10) minutes.



Finish attempt ...

Create		
Name	Entity Type	
Customer Arrival	Customer	
Time Between Arrivals		
Type	Expression	Units
Expression	DPO(5)	Hours
Entities per Arrival	Max Arrivals	Cost Coefficient
1	100	400
<input type="button" value="OK"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>		

Decide	
Name	Type
Decide 2	2-way by Chance
Percent True (0-100)	
5%	0
<input type="button" value="OK"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>	

Process	
Name	Type
Process in Bank	...

Process	
Name	Type
Process in Bank	...

100 420

OK Cancel Help

Time

OK Cancel Help

Process

Item: Process in 8 sec Type: Standard

Logic

Condition: Delay Follows

Parameters

Line 1 of 10	Add...
	Edit...
	Delete

Delay Type: Triangle Unit: Hours Allocation: Value Added

Minimum: 2 Value (Most Likely): 5 Maximum: 10

Report Statistics

OK Cancel Help

Process

Item: Process in 8 sec Type: Standard

Logic

Condition: Delay Follows

Parameters

Line 1 of 10	Add...
	Edit...
	Delete

Delay Type: Triangle Unit: Hours Allocation: Value Added

Minimum: 2 Value (Most Likely): 5 Maximum: 10

Report Statistics

OK Cancel Help



Adding a delay for two minutes instead of a route that takes two minutes

- This would work from modeling/numerical output viewpoints
- This would not allow animation of part transfers
- All of the above
- None of the above

Clear my choice

Time left 0:45:43

Repeating the simulation for 3 times with each run for a length of 50 hours will result in a sample size of

- 50
- 3
- 150
- It depends on the last enters the queue

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For the model (ATM) shown, if the replication length is set to be 8 hours, the final output entities will be

- a. 150
- b. I do not know (I need to run it to figure it out)
- c. Zero
- d. One

Question 16

Not yet
answeredMarked out of
1.00Flag
question

One of the following is not an event

- a. Entity leaving the queue and starts service
- b. The third entity leaves the service
- c. When the simulation clock hits the final simulation time
- d. The arrival of the second entity

Question 17

Answer saved

Marked out of
1.00

In the simulation, doing more than one replication will make the system valid.

Select one:

- True

False

Question 20

Not yet answered

Marked out of 1.00

Flag question

Time left 02:44

Finish attempt...

Nonstationary Arrival Processes is a probabilistic model that

- a. means the interarrival time distribution is not exponential
- b. Reflects statistics gathered before reaching steady-state
- c. Reflects time-varying arrival patterns
- d. Reflects arrivals according to a specific schedule

Question 21

Not yet answered

Marked out of 1.00

Flag question

What was the performance measure of interest for the call center case study?

- a. Percentage of calls forwarded to the sales from order status
- b. Number of calls for technical calls type 1, 2 and 3
- c. Percentage of calls successfully answered
- d. The service time of salespersons

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Type here to search



45°F Sunny ENG

Question 26

Not yet answered

Marked out of 1.00

Remove flag

Given that the replication length is very long, we expect the model (Gluing Model) to

- a. The output will be one entity
- b. Reach a steady-state very fast
- c. The queue will keep growing incrementally
- d. The resource will be underutilized

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delay module from the block panel includes, by default, the store, and un-store modu

ect one:

True

False

True



Time left 0:50:33

The following data are times between arrivals from a Poisson arrival process (in minutes): 3, 5, 4. A reasonable Arena input model for the times between arrivals would be

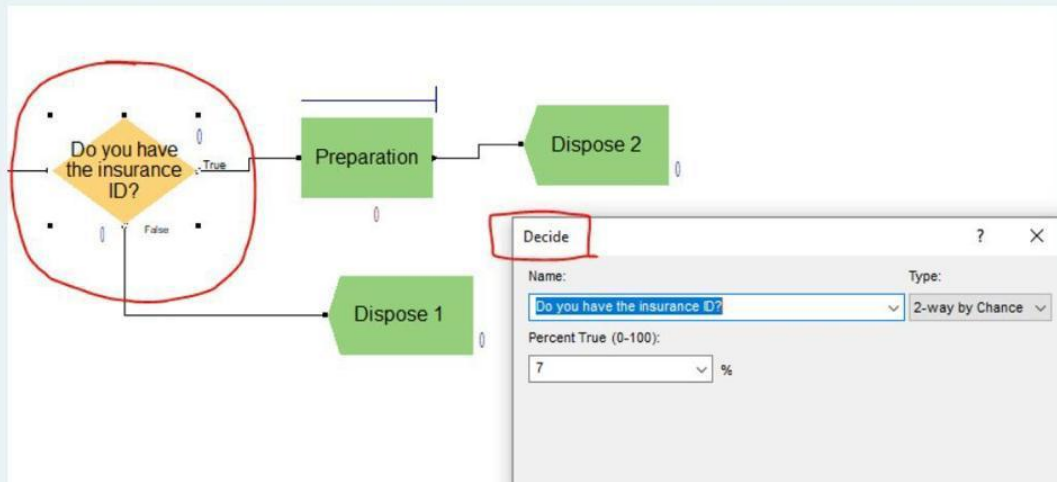
- Random.Exponential(5)
- Random.Exponential(0.2)
- Random.Poisson(5)
- Random.Poisson(0.2)

Clear my choice

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This part of the model might have an error, what is it (if there is one)?



- Has no error
- The percentage should be 93%
- Dispose modules should be swapped
- Decide rule should 2-way by condition

the Create Module shown below for the clinic system, how many errors are there (if any)? (Hint: deal with every entry in the module separately)

Create ? ×

Name: Entity Type:

Time Between Arrivals

Type: Value: Units:

Entities per Arrival: Max Arrivals: First Creation:

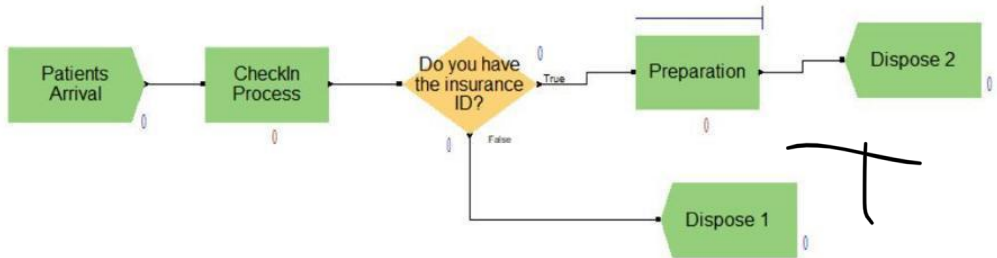
Comment:

Answer:

3

3

Patients arrive at a clinic according to a Poisson process with an average of FOUR per HOUR. The clinic opens at 8:00 am and closes its doors at 3:00 pm (does not allow anyone in). However, the patients who are already in the clinic will continue to be served. The clinic will not shut down until all patients are flushed out (given it is 3:00 pm or after). There are two processes in this system, the check-in that requires the receptionist and takes TRIA(0.5,2,3) minutes, and the preparation that needs the nurse and takes TRIA(7,10,20) minutes. Incoming patients have the chance of 7% not going through the whole process since they forgot their insurance I.D. The following is a draft of the model, which has **something wrong** with the modules.



Select one:

- True
- False