SM PROJECT QUESTION AND FINDINGS

Section: BS(SE)-6B

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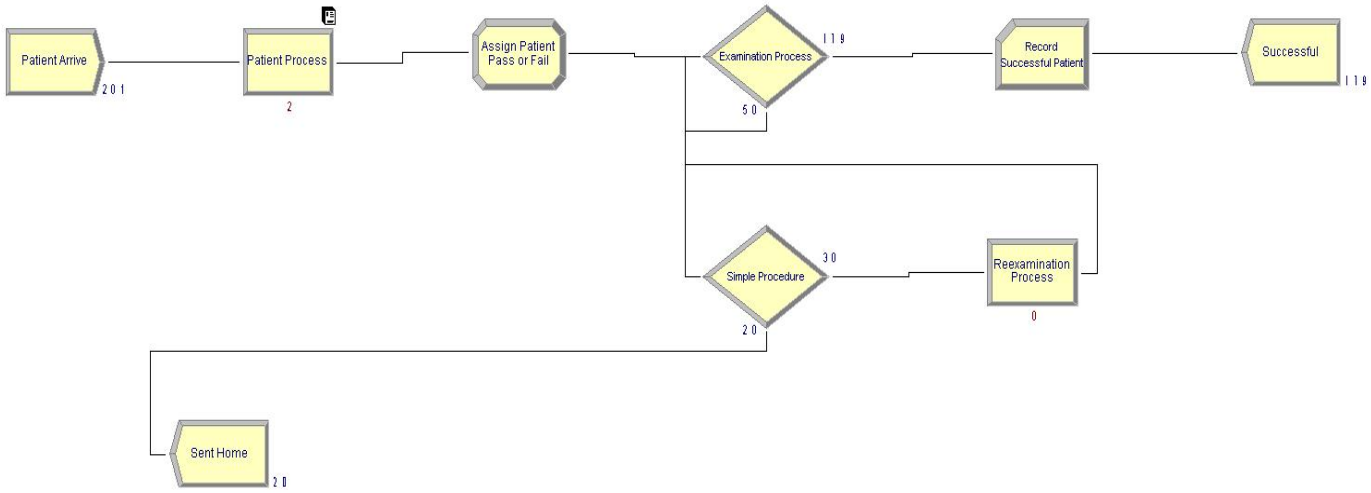
QUESTION

In a multiphasic screening clinic, patients arrive at a rate of one every 5 ± 2 minutes to enter the audiology section. The examination takes 3±1 minutes. Eighty percent of the patients were passed on to the next test with no problems. Of the remaining 20%, one-half require simple procedures that take 2±1 minutes and are then sent for reexamination with the same probability of failure. The other half are sent home with medication. Simulate the system to estimate how long it takes to screen and pass 200 patients. (*Note:* Patients sent home with medication are not considered "passed.")

ARENA MODEL



INTERPRATION FROM REPORT

The question asked us to find the estimate value in minutes that how long it takes to screen and pass 200 patients. The result from the report showed that it took an average of 3.8159 minutes for a single patient to screen and pass. The simulation is also run for 200 patients so the average calculated is proportional to the requirement of the question. Now we know the average time for 1 patients we can multiply it by 200 to get the actual value.

"It will take an average of 763 minutes to screen and pass 200 patients."