

See IM.

24. Determine the minimum number of workers needed, and a schedule for the following staffing requirements, giving workers two consecutive days off per cycle (not including Sunday).

Day	Mon	Tue	Wed	Thu	Fri	Sat
Staff needed	2	3	1	2	4	3

25. Determine the minimum number of workers needed, and a schedule for the following staffing requirements, giving workers two consecutive days off per cycle (not including Sunday).

Day	Mon	Tue	Wed	Thu	Fri	Sat
Staff needed	3	4	2	3	4	5

See IM.

26. Determine the minimum number of workers needed, and a schedule for the following staffing requirements, giving workers two consecutive days off per cycle (not including Sunday).

Day	Mon	Tue	Wed	Thu	Fri	Sat
Staff needed	4	4	5	6	7	8

Hi-Ho Yo-Yo, Inc.

CASE



It was a little past 9:00 on a Monday morning when Jeff Baker walked into your office with a box of donuts.

"I've been talking with Anne about a problem we have with short-term capacity in our pad printing operation. You know, that's where we print the logo on the Custom lines of yo-yos. We have received more orders than usual for July, and I want to release the orders to pad printing in a way that will enable us to meet our due date commitments in the best way possible. Would you have time to look at the order list (attached) and see what kind of schedule we should follow to do that? By the way, you have established quite a reputation in your short stay here. You have a talent for really explaining why your recommendations are the best approach in a way that all of us 'over-the-hill' managers can understand. Please be sure to do that for me too. I want to understand why your recommendation is the best schedule and what the tradeoffs are for other possible schedules—and none of that philosophical college mumbo-jumbo. Remember, I came up through the ranks. I don't have one of those sheepskins on my wall," he says with a laugh.

Since your schedule was back to normal after that MRP report you did for Anne, you agreed to look at the information. After that compliment, how could you say no? "Try to get back to me within a couple of days," Jeff said as he left your office.

After a few minutes with your old operations management text, you call the production control office to confirm the pad printing schedule. They confirm that pad printing runs one eight-hour shift per day. They tell you that due to a make-up day for flooding in

June, pad printing will be running 23 days in July, beginning Friday, July 1 (they will work three Saturdays on July 9, 16, and 23, and take a one-day holiday for July 4). You thank them for the information and then you begin to develop your plan.

Even though Jeff lacks a college degree, from what you have seen, he is very sharp. And obviously he knows good work when he sees it since he liked, and apparently understood, your past work. You resolve to cover all the bases but in a way that is as clear as possible.

PAD PRINTING ORDER LIST

Job	Date Order Received	Set-up Time	Production Time	Due Date
A	6/4	2 hrs.	6 days	11 July
B	6/7	4 hrs.	2 days	8 July
C	6/12	2 hrs.	8 days	25 July
D	6/14	4 hrs.	3 days	19 July
E	6/15	4 hrs.	9 days	29 July

Note: Setup time is to set up the pad printer at the start of the job. Setup includes thoroughly cleaning the printing heads and ink reservoirs, installing the new pad(s) and ink supply, and carefully aligning the machine. Setup at the beginning of a new day with the same job is insignificant.

Examine the following rules and write a report to Jeff Baker summarizing your findings and advise him on which rule to use. Rules: FCFS, SPT, DD, and CR.

Source: © 2005 Victor E. Sower, Ph.D., C.O.E.

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