

Gilbreth Bathroom Scheduling Problem

Child	Time in Bathroom (minutes)	Minutes to Walk to School
Ann	7	8
Bridget	4	6
Charlie	5	7
David	2	9
Emily	6	6

What is the objective?

What order should they go in?
(Priority Rule)

Bathroom Scheduling Problem

Priority Rule (Who gets to go first?): _____

Order	Child	(1) Start Time 8:00	(2) Bathroom Time	(3) End Time (1) + (2)	(4) Walk Time	(5) Arrive at School (3) + (4)	(6) Lateness School Starts at 8:15 15 - (5)
1st		0					
2nd							
3rd							
4th							
5th							

Total Minutes Late: (total #6) _____ min

of Children Late: (count #6) _____ children

Avg Lateness: (Tot Min Late/ # Late) _____ min/child

of Children Later than 10 minutes: _____ children

Bathroom Scheduling Problem

Results

Order	Total Min Late	# Late	Avg Min Late	# Late Over 10 Min
First Come, First Served	37	4	9.25	2
Shortest Processing Time (Bathroom)	28	3	9.33	1
Longest Processing Time (Bathroom)	45	4	11.25	3
Earliest Due Date (Shortest Walker)	41	4	10.25	2
Latest Due Date (Longest Walker)	34	4	8.5	2