

Lifts worksheet

Situation 1

Floor	Lift 1	Lift 2	Lift 3	Passengers waiting
10			○	
9				↑ [1]
8				
7	↑ (10,8)			
6				
5				
4				
3		○		
2				
1				
0				↑ [2]

Situation 2

Floor	Lift 1	Lift 2	Lift 3	Passengers waiting
10		○		↓ [3]
9				
8			↑ (9)	
7				
6				
5				
4				
3				
2				↓ [1] ↑ [2]
1	↓ (0)			
0				

Key:

- Position of each lift is indicated by ○ if stationary; ↑ if moving up; ↓ if moving down.
- Numbers in brackets next to lift indicator illustrate destination floor of passengers already in the lift.
- Arrows in passenger column indicate that a lift has been called to go in that direction on that floor. The number in square brackets indicates the order in which these calls were made.

Situation 3

Floor	Lift 1	Lift 2	Lift 3	Passengers waiting
10				↓ [1]
9	↓ (0,3,1)			
8		↑ (10)		
7				↑ [2]
6				
5				↓ [6] ↑ [5]
4			↓ (0,1)	
3				↑ [7]
2				↓ [4] ↑ [3]
1				
0				

Situation 4

Floor	Lift 1	Lift 2	Lift 3	Passengers waiting
10				
9			↑ (10)	↓ [6]
8				
7				↓ [3]
6				↓ [1] ↑ [4]
5				
4		↑ (9,7,6)		
3				↓ [7]
2				↓ [2]
1	↓ ()			
0				↑ [5]

Key:

- Position of each lift is indicated by ○ if stationary; ↑ if moving up; ↓ if moving down.
- Numbers in brackets next to lift indicator illustrate destination floor of passengers already in the lift.
- Arrows in passenger column indicate that a lift has been called to go in that direction on that floor. The number in square brackets indicates the order in which these calls were made.