CompSci-230: Homework 6
Jitao Zhang

1.

4	6	6	6	6	
5	5	6	5	5	
4	5	5	5	3	
2	3	3	1	3	
1	1	1	2	2	
P1	P2	P3	P4	P5	idling ratio is 0

Explain: I make J4 and J6 execute more times in one period. For J4, it only runs in P1, so it is legal. For J6, even though it run in 4 different processors, but they are not ahead each other more than one time slice, so it is legal too.

2. (a)

6	6	4	6	
5	5	4	6	
5	5	5	5	
3	3	3	3	
2	2	2	5	
1	1	1	1	
P1	P2	P4	P5	idling ratio is 0

Explain: I still make J4 and J6 execute more times in one period. The reason is the same as above.

(b)

5	3	1	6	
4	6	6	6	
5	5	5	5	
4	5	5	3	
2	3	1	3	
1	1	2	2	
P1	P2	P4	P5	idling ratio is 0

Explain: I just migrate 4 of the original 5 VP in P3. The J6 execute more than once. But it is still legal.

3. Cost of (a) is 15 VPs

6	6	4	6
5	5	4	6
5	5	5	5
3	3	3	3
2	2	2	5
1	1	1	1
P1	P2	P4	P5

Cost of (b) is only 4 VPs

5	3	1	6
4	6	6	6
5	5	5	5
4	5	5	3
2	3	1	3
1	1	2	2
P1	P2	P4	P5

So the way of re-assigns VPs is more efficient than totally generate a new allocation model.