Problem 2:

Solution presented as (1 is the first item popped, 2 is the second item popped, 3 is the second item popped, and so on):

1. (4,6)
2. (3,6)
3. (5,6)
4. (5,7)
5. (5,8)
6. (6,8)
7. (7,8)
8. (8,8)
9. (8,7)
10. (6,6)
11. (4,5)
12. (4,4)

Problem 4:

1. (4,6)
2. (4,5)
3. (5,6)
4. (3,6)
5. (4,4)
6. (6,6)
7. (5,7)
8. (4,3)
9. (5,4)
10. (5,8)
11. (4,2)
12. (6,4)