

Ugeopgave 3

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Task 1

```
1 CHECK-SUPPLY(b', P, B)
2   let M and F be empty lists
3
4   for i = 1 to length of B
5     if B[i] < b'
6       F = [i | F]
7     else if B[i] > b'
8       M = [i | M]
9
10  for each m in M
11    if F is empty
12      return true
13    else
14      f = head(F)
15      dist = abs(P[m] - P[f])
16      surplus = B[m] - b'
17      demand = b' - B[f]
18      cost = 2 * dist
19      load = min(surplus, demand + cost)
20      B[m] = B[m] - load
21      B[f] = B[f] + load - cost
22      if B[f] >= b'
23        F = tail(F)
```

Task 2

Task 3