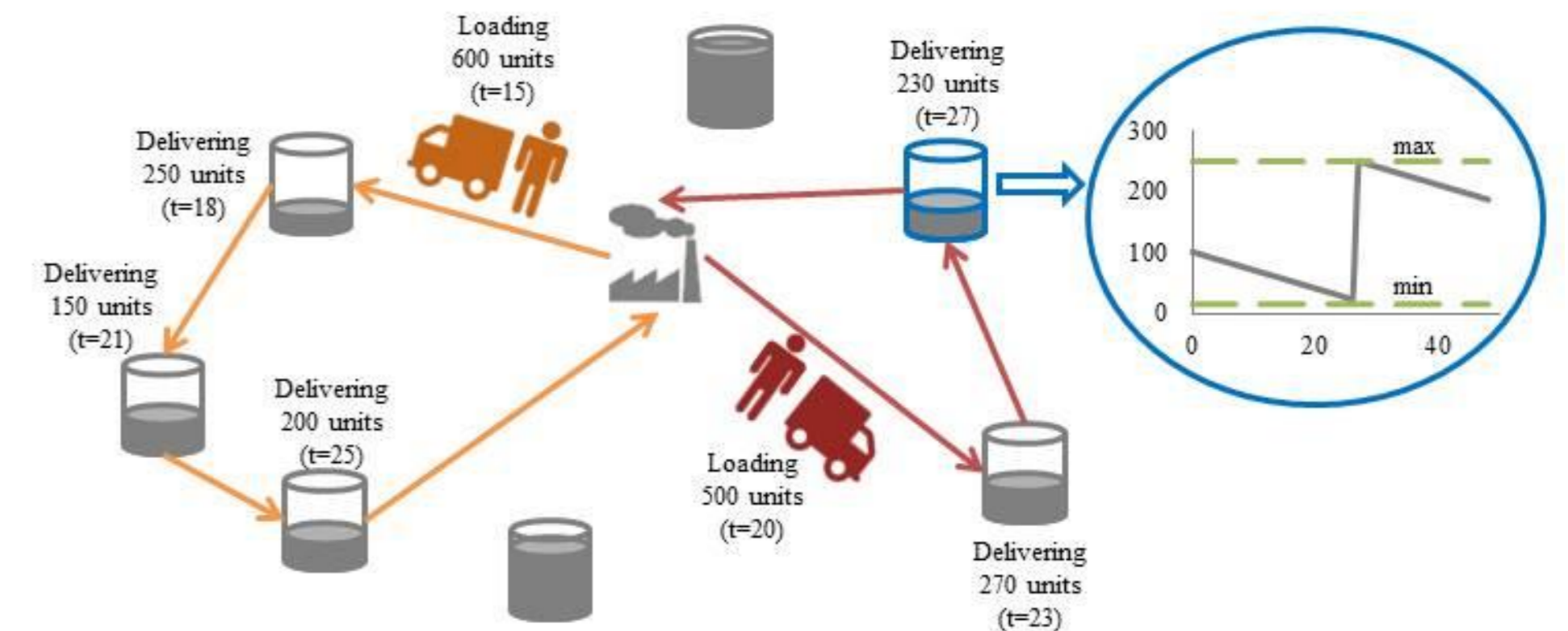


SISTEM TRANSPORTASI DAN DISTRIBUSI BARANG

Integrasi Perutean Kendaraan dan Persediaan

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Program Studi S1 Teknik Industri – Telkom University



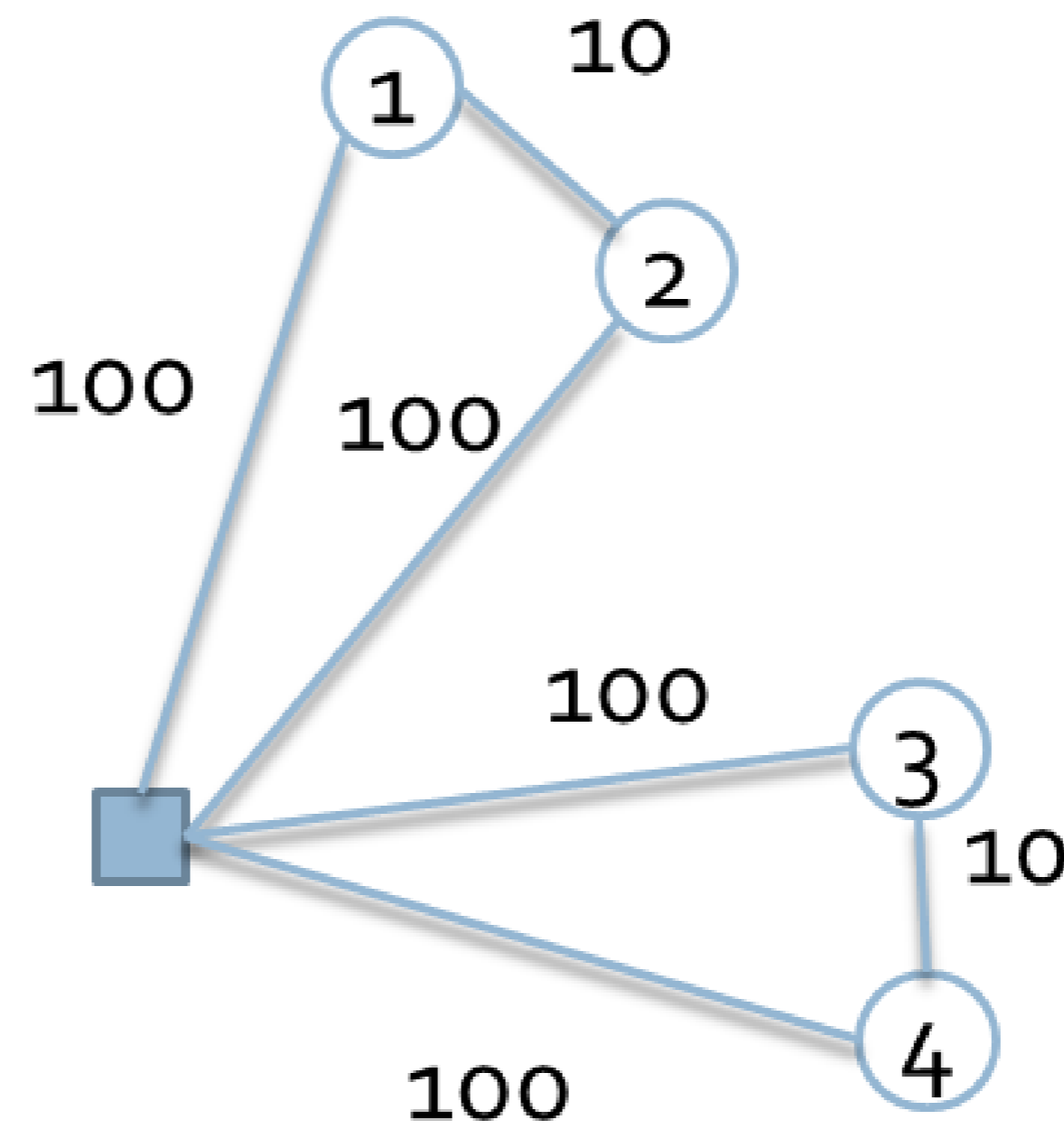
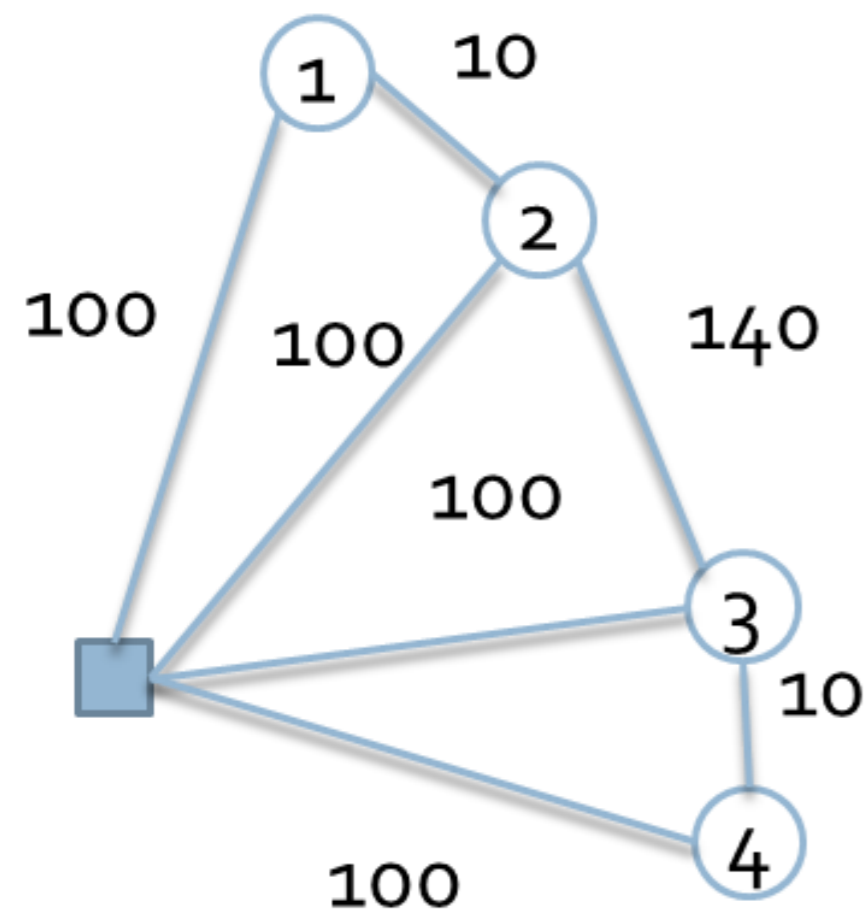


Perbedaan VRP dan IRP

Hasil Perutean Kendaraan

	Customer			
	1	2	3	4
Daily Demands	1,000	3,000	2,000	1,500
Max Inventory Level	5,000	3,000	2,000	4,000

Vehicle Capacity 5000

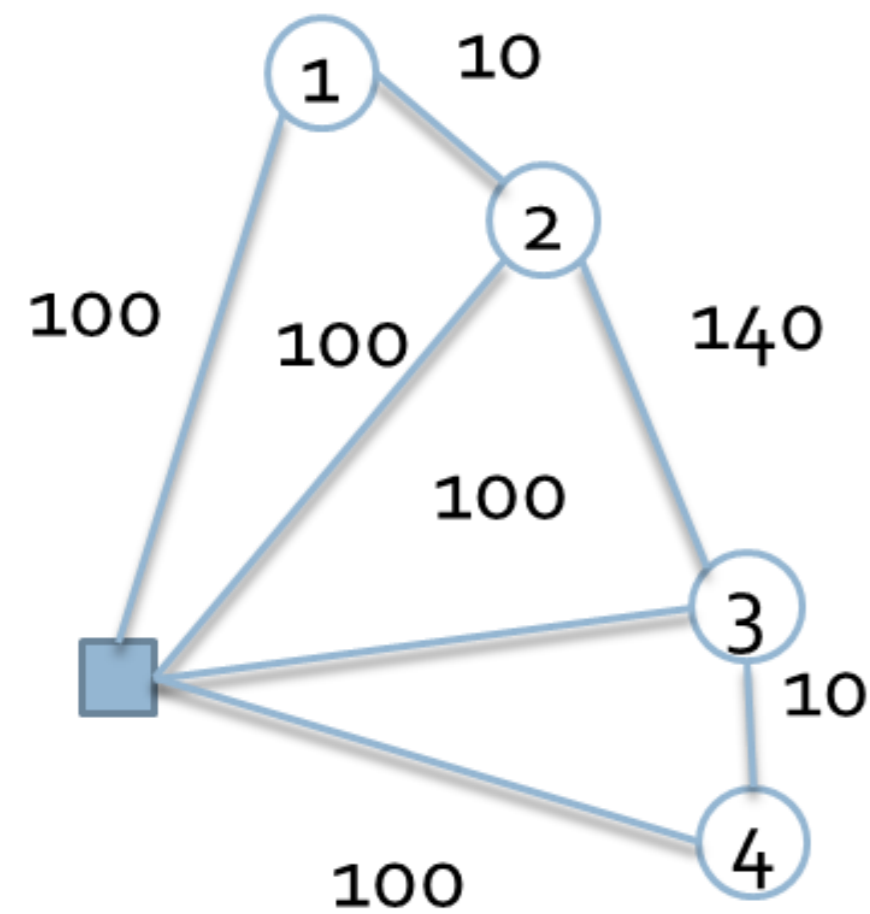


VRP Solution:
 Total Distance 420
 Trip:
 D-1-2-D → 4000
 D-3-4-D → 3500

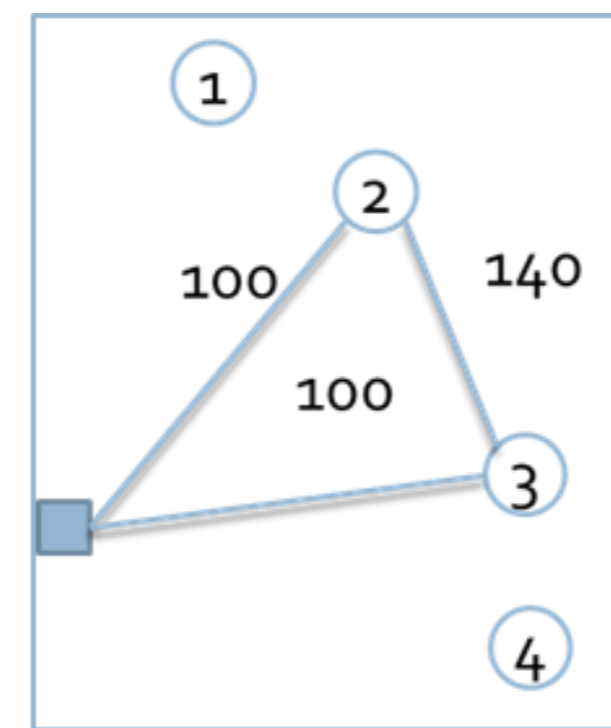
► Solusi dengan Memperhatikan Manajemen Persediaan (IRP)

	Customer			
	1	2	3	4
Daily Demands	1,000	3,000	2,000	1,500
Max Inventory Level	5,000	3,000	2,000	4,000

Vehicle Capacity 5000

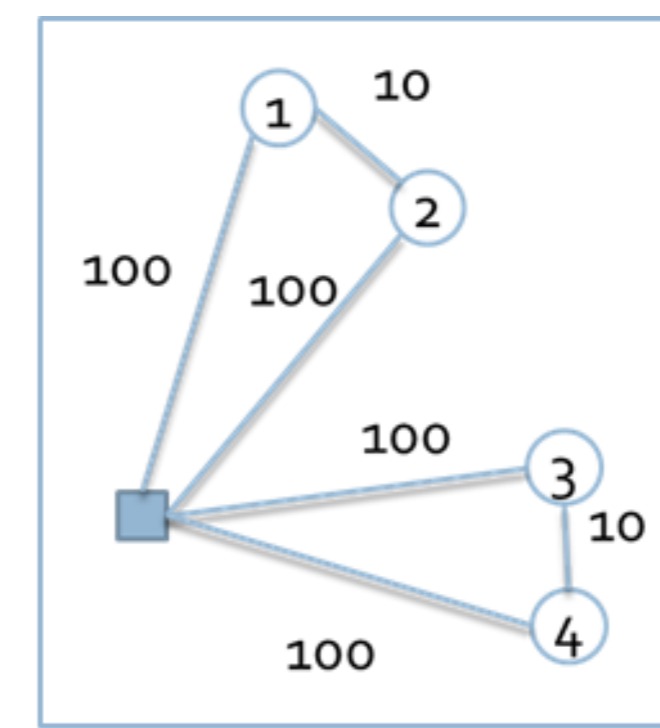


Two days plan:
Daily average = 380



Day 1

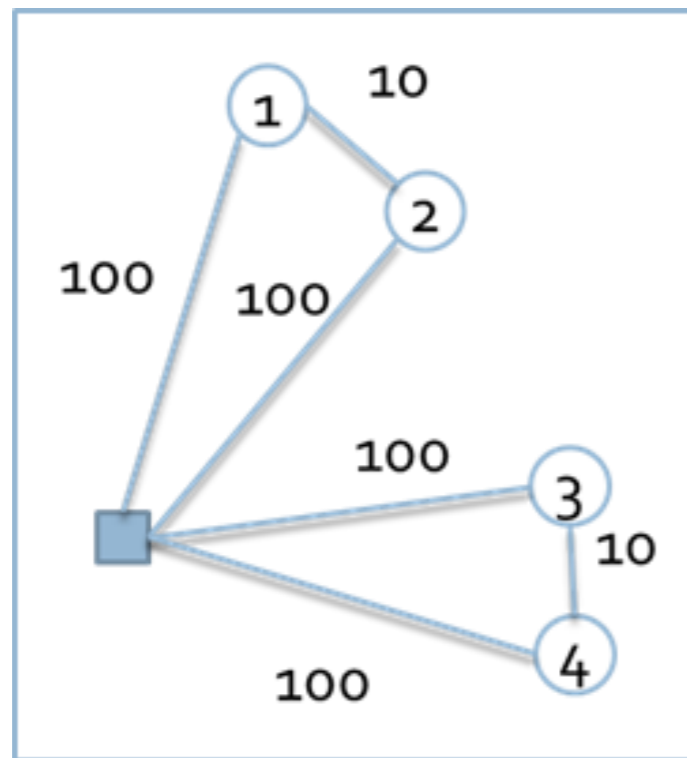
Total Distance: 340



Day 2

Total Distance: 420

Perbedaan Solusi VRP dan IRP

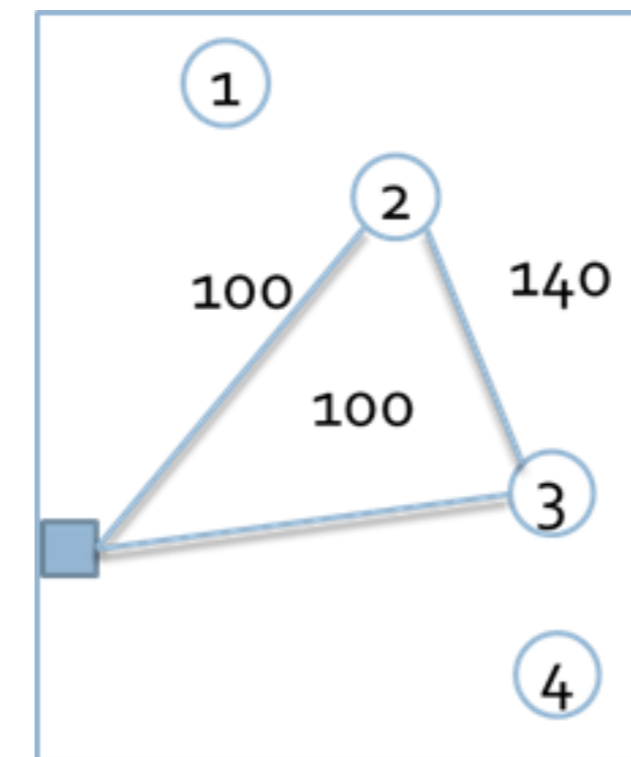
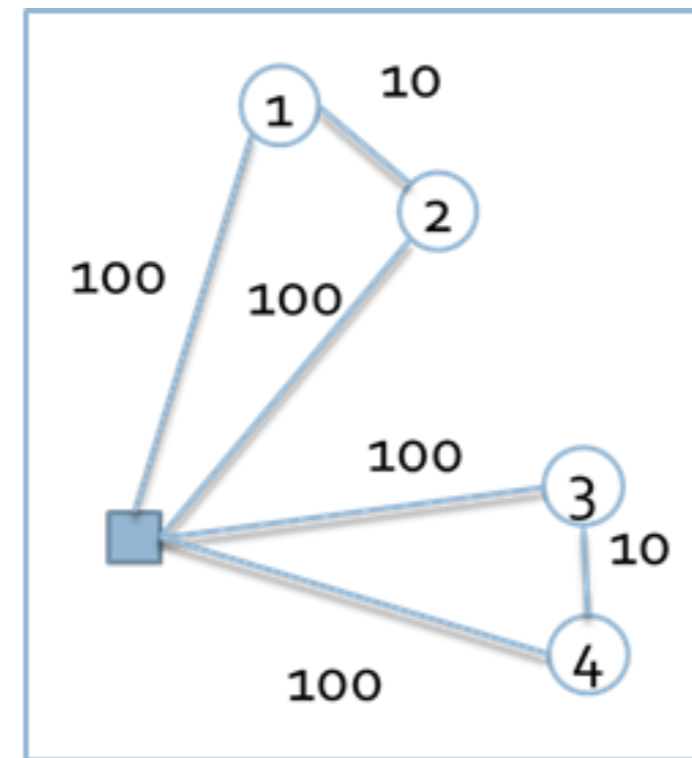


Routing

4 trips

Daily Average Distance = 420

Total Delivery 7500 per day

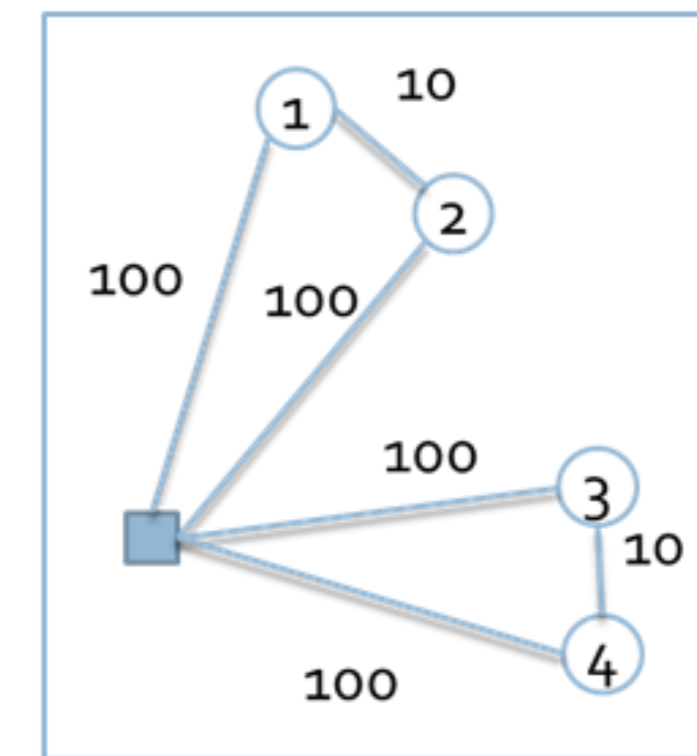


Routing and Inventory

3 trips

Daily Average Distance = 380

Total Delivery 7500 per day



Considering the inventory will delivers the same amount of volume using 10% fewer miles