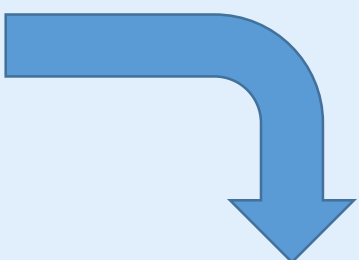


North West Corner Method

Algorithm

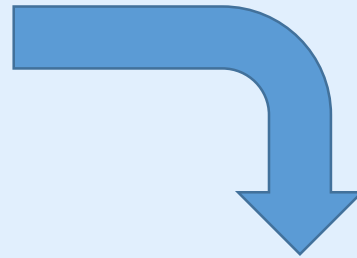
North-West Corner Method (NWCN) Steps (Rule)	
Step-1:	Select the upper left corner cell of the transportation matrix and allocate $\min(s_1, d_1)$.
Step-2:	a. Subtract this value from supply and demand of respective row and column. b. If the supply is 0, then cross (strike) that row and move down to the next cell. c. If the demand is 0, then cross (strike) that column and move right to the next cell. d. If supply and demand both are 0, then cross (strike) both row & column and move diagonally to the next cell.
Step-3:	Repeat this steps until all supply and demand values are 0.

	D1	D2	D3	D4	Supply
S1	19	30	50	10	7
S2	70	30	40	60	9
S3	40	8	70	20	18
Demand	5	8	7	14	



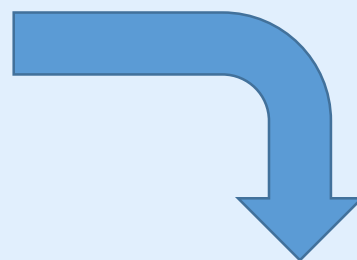
	D_1	D_2	D_3	D_4	Supply
S_1	19(5)	30	50	10	2
S_2	70	30	40	60	9
S_3	40	8	70	20	18
Demand	0	8	7	14	

	D_1	D_2	D_3	D_4	Supply
S_1	19(5)	30	50	10	2
S_2	70	30	40	60	9
S_3	40	8	70	20	18
Demand	0	8	7	14	



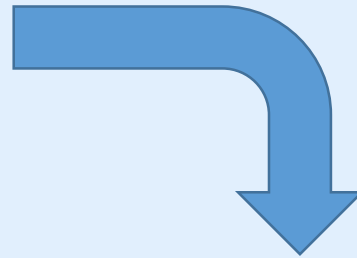
	D_1	D_2	D_3	D_4	Supply
S_1	19(5)	30(2)	50	10	0
S_2	70	30	40	60	9
S_3	40	8	70	20	18
Demand	0	6	7	14	

	D_1	D_2	D_3	D_4	Supply
S_1	19(5)	30(2)	50	10	0
S_2	70	30	40	60	9
S_3	40	8	70	20	18
Demand	0	6	7	14	



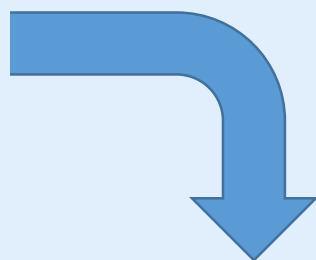
	D_1	D_2	D_3	D_4	Supply
S_1	19(5)	30(2)	50	10	0
S_2	70	30(6)	40	60	3
S_3	40	8	70	20	18
Demand	0	0	7	14	

	D_1	D_2	D_3	D_4	Supply
S_1	19(5)	30(2)	50	10	0
S_2	70	30(6)	40	60	3
S_3	40	8	70	20	18
Demand	0	0	7	14	



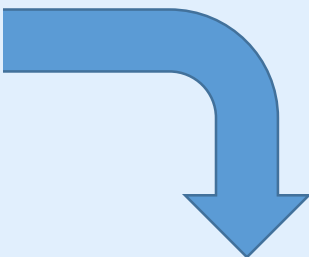
	D_1	D_2	D_3	D_4	Supply
S_1	19(5)	30(2)	50	10	0
S_2	70	30(6)	40(3)	60	0
S_3	40	8	70	20	18
Demand	0	0	4	14	

	D_1	D_2	D_3	D_4	Supply
S_1	19(5)	30(2)	50	10	0
S_2	70	30(6)	40(3)	60	0
S_3	40	8	70	20	18
Demand	0	0	4	14	



	D_1	D_2	D_3	D_4	Supply
S_1	19(5)	30(2)	50	10	0
S_2	70	30(6)	40(3)	60	0
S_3	40	8	70(4)	20	14
Demand	0	0	0	14	

	D_1	D_2	D_3	D_4	Supply
S_1	19(5)	30(2)	50	10	0
S_2	70	30(6)	40(3)	60	0
S_3	40	8	70(4)	20	14
Demand	0	0	0	14	



	D_1	D_2	D_3	D_4	Supply
S_1	19(5)	30(2)	50	10	0
S_2	70	30(6)	40(3)	60	0
S_3	40	8	70(4)	20(14)	0
Demand	0	0	0	0	

	D_1	D_2	D_3	D_4	Supply
S_1	19 (5)	30 (2)	50	10	7
S_2	70	30 (6)	40 (3)	60	9
S_3	40	8	70 (4)	20 (14)	18
Demand	5	8	7	14	

The minimum total transportation cost = $19 \times 5 + 30 \times 2 + 30 \times 6 + 40 \times 3 + 70 \times 4 + 20 \times 14 = 1015$