

Maximal flow problems are converted to transshipment problems by

- ☐ a. adding extra supply nodes
- ☐ b. requiring integer solutions
- ☒ c. connecting the supply and demand nodes with a return arc
- ☐ d. adding supply limits on the supply nodes

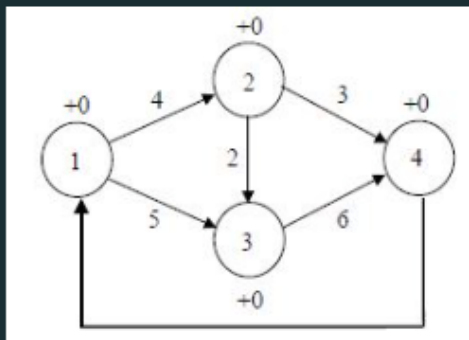
[Clear my choice](#)

The number of constraints in network flow problems is determined by the number of

- ☐ a. supplies.
- ☐ b. demands.
- ☒ c. nodes.
- ☐ d. arcs.

[Clear my choice](#)

What is the objective function in the following maximal flow problem?



- ☐ a.  $\text{MAX } X_{14}$
- ☐ b.  $\text{MIN } X_{41}$
- ☒ c.  $\text{MAX } X_{41}$
- ☐ d.  $\text{MAX } X_{12} + X_{13} + X_{23} + X_{24} + X_{34}$

[Clear my choice](#)

The arcs in a network indicate all of the following except?

- ☒ a. constraints
- ☐ b. routes
- ☐ c. paths
- ☐ d. connections

[Clear my choice](#)

How many constraints are there in a transportation problem which has 6 supply points and 5 demand points? (ignore the non-negativity/integer constraints)

- ☐ a. 5
- ☒ b. 11
- ☐ c. 30
- ☐ d. 6

[Clear my choice](#)

A factory which ships items through the network would be represented by which type of node?

- ☐ a. random
- ☐ b. decision
- ☒ c. supply
- ☐ d. demand

[Clear my choice](#)

How could a network be modified if demand exceeds available supply?

- ☐ a. remove the extra demand arcs
- ☒ b. add a dummy supply
- ☐ c. add a dummy demand
- ☐ d. add extra supply arcs

[Clear my choice](#)