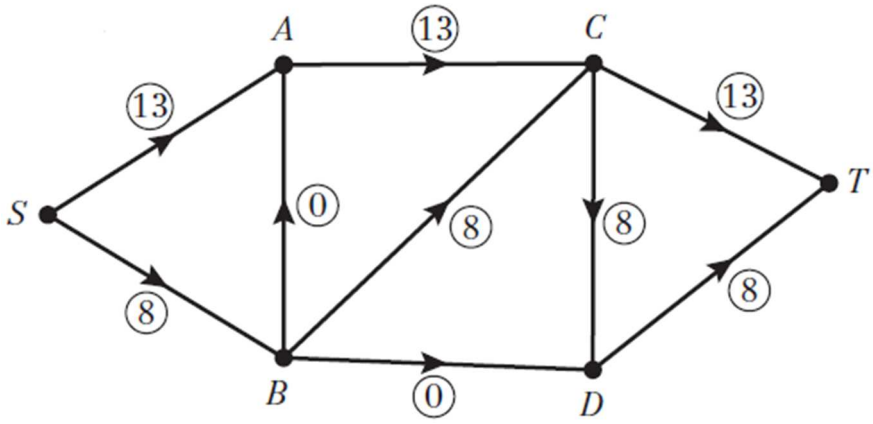
Flow in networks 3C

1 a max flow along $SACT = 13$

max flow along $SBCDT = 8$

b i



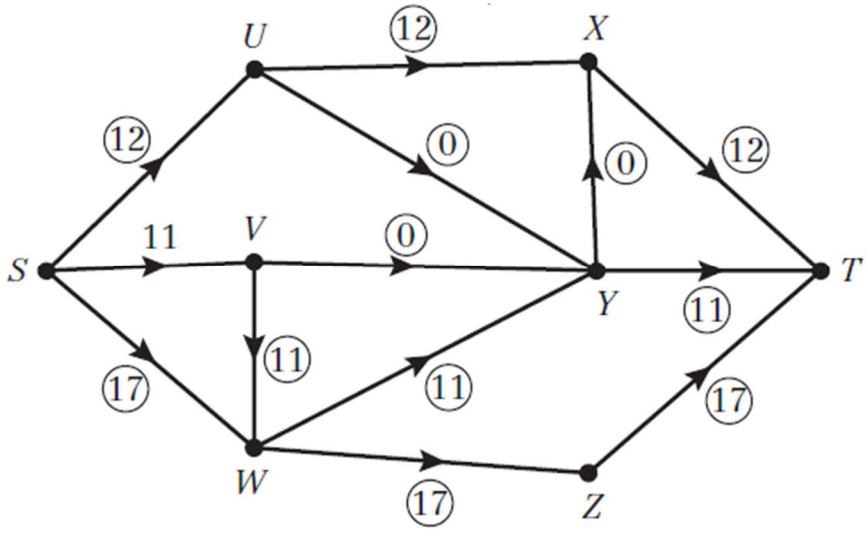
ii Value of initial flow = 21

2 a max flow along $SUXT = 12$

max flow along $SWZT = 17$

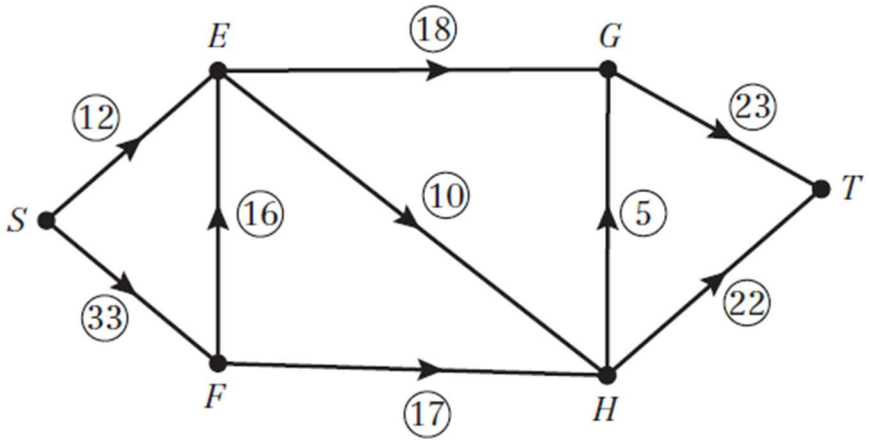
max flow along $SVWYT = 11$

b i



ii Value of initial flow = 40

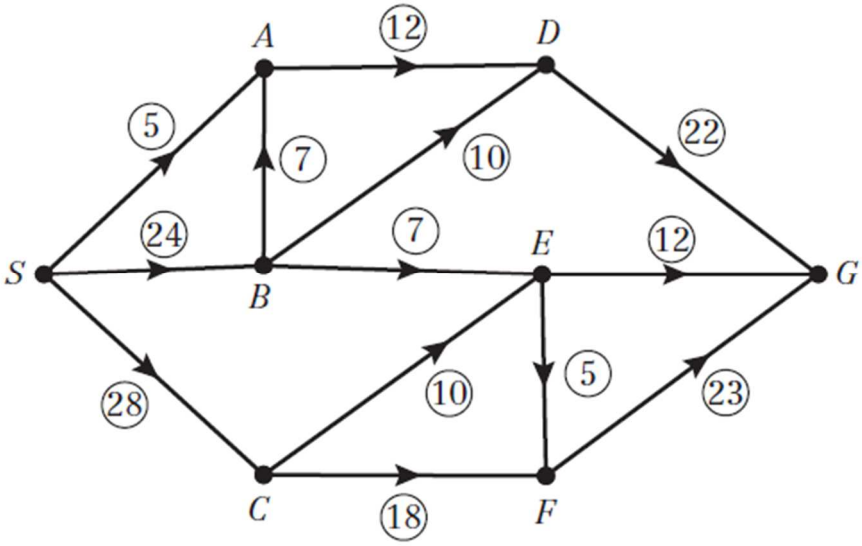
3 a



b Value of initial flow = 45

4 a Using the flow – conservation rule, we know that flow out of F = flow into F. Even if both EF and CF were saturated, they would only add up to 23, meaning that no more than 23 could flow out of F. Thus FG cannot reach its capacity at 25. So FG cannot be saturated.

b



c Value of initial flow 57