5a. Algo(T, e) T is MST and e is new edge

C = findC(T, e) C = cycle

(For every el in C):

if weight[e] > weight[el]

remove el from T and add e into T

return

5b. Algo 2(T, e)

C = findC(T, e)

(For every el in C):

If weight[e] ≥ weight[el]

remove el from T and add e to T

return

5c. Algo 3(T, e)

C = findC(T, e)

(find the minimum weighted edge el not in T

If weight[e] > weight[el]

remove e from T and add el

else

return

10. a

s-1-4-t = 10

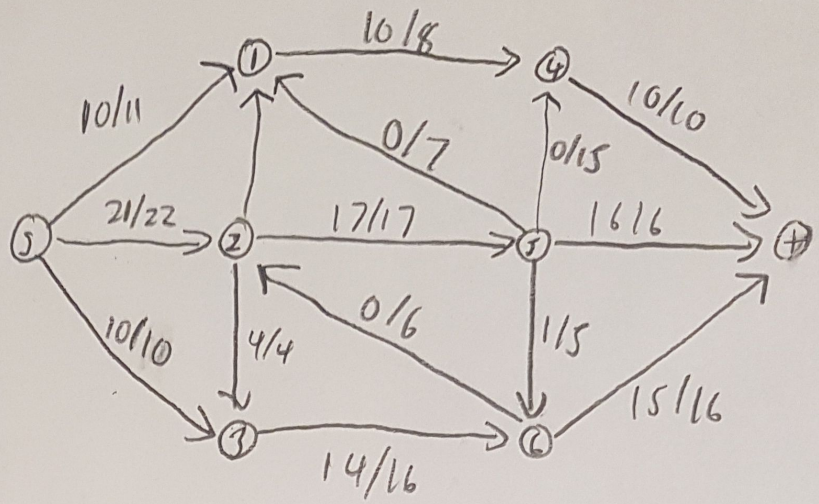
s-2-5-t = 16

s-3-6-t = 10

s-2-3-6-t = 4

s-2-5-6-t = 1

s-2-5-6-t = 5



Max = 41

b. Cut = {s, 1, 4, 2}

Capacity of cut = 41 = flow

$|41| \leq 41$

mincut = 41

C. capacity of mincut = 41.