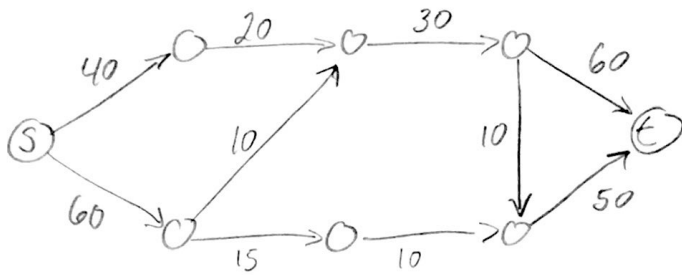# 4. Use Ford-Fulkerson to find the min-cut
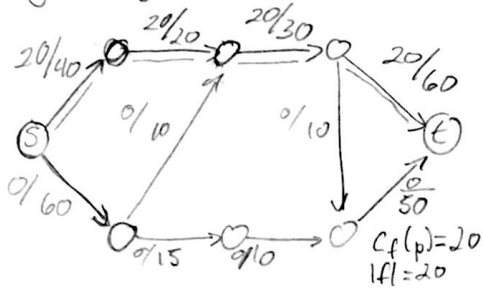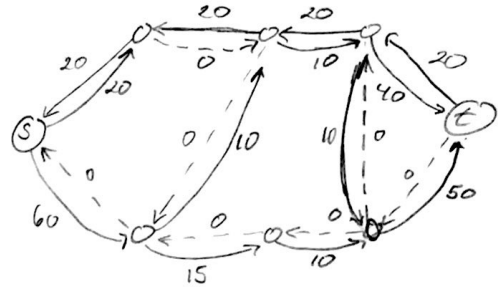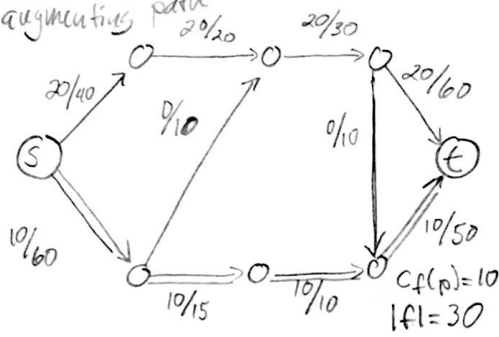

augmenting path

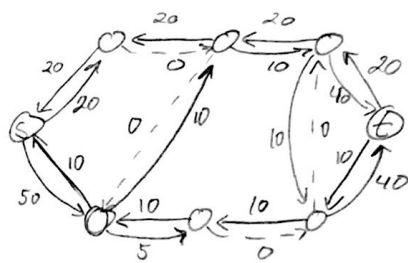
$c_f(p) = 20$
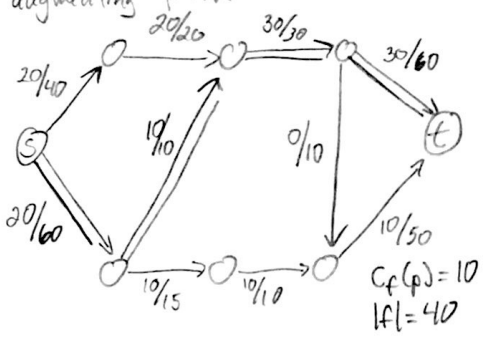$|f| = 20$

residual network

augmenting path

$c_f(p) = 10$
$|f| = 30$

residual network

augmenting path

$c_f(p) = 10$
$|f| = 40$

residual network
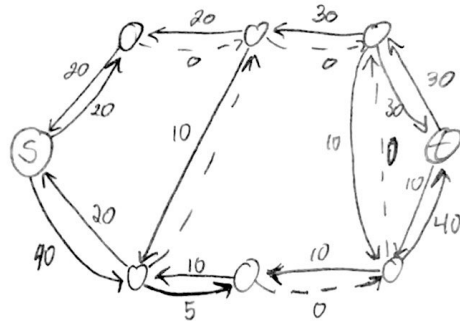
no more augmenting paths
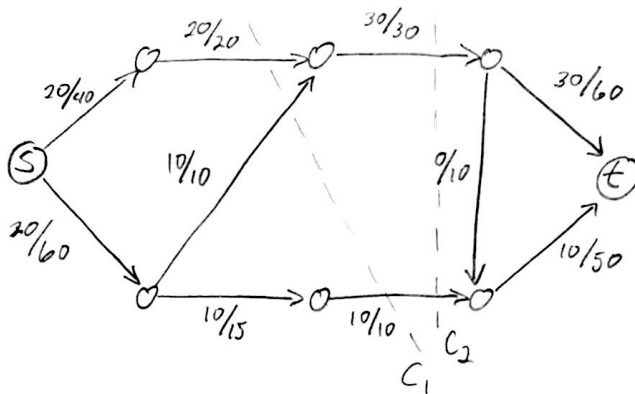
C_1 C_2

2 min cuts — C_1 & C_2

C_1: $f(S,T) = 20 + 10 + 10 = 40$ } $f(S,T) = c(S,T)$
   $c(S,T) = 20 + 10 + 10 = 40$

C_2: $f(S,T) = 30 + 10 = 40$ } $f(S,T) = c(S,T)$
   $c(S,T) = 30 + 10 = 40$