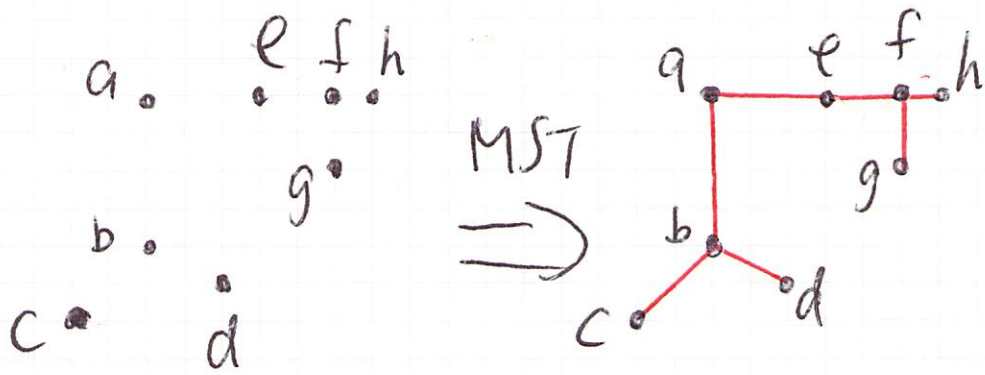
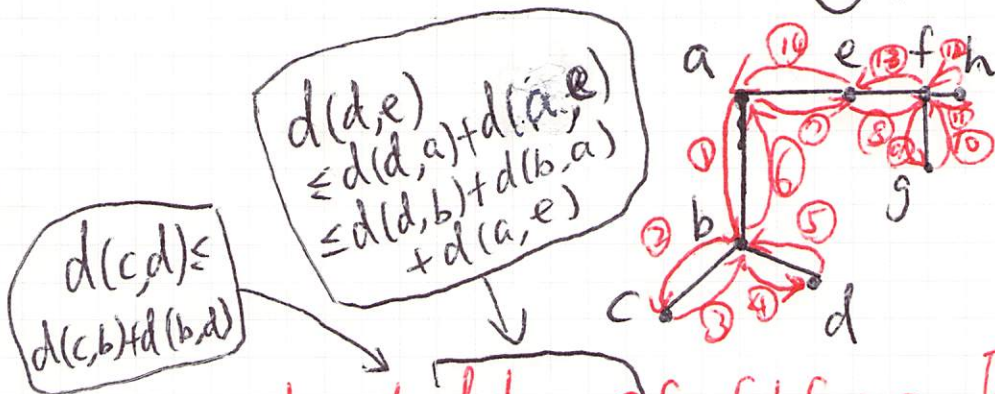


Triangle Inequality \Rightarrow MST = 2-approx. for TSP
 $d(u,w) \leq d(u,v) + d(v,w)$ Kun-Mao Chao @ 2019



\Downarrow preorder tree walk



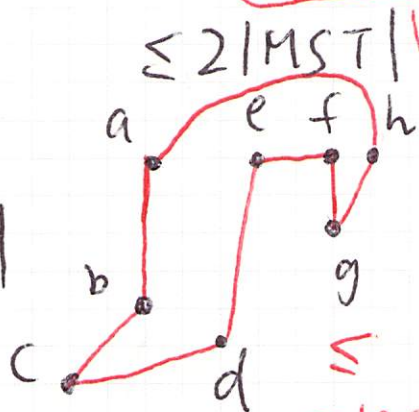
$2 |MST|$

a b c b d b a e f g f h e a

※ 此為平面圖
 Euclidean Space
 需排序
 3點共線

\Downarrow
 a b c d e f g h a

$|Optimal\ TSP| \geq |MST|$



$2 |Opt_{max}\ TSP|$