uv	worst case cost at u	worst case cost at v	cost ratio
(1,2)	4	1	5/3
(1,3)	4	2	6/4
(1,4)	4	3	7/5
(2,2)	4	1	5/4
(2,3)	4	2	6/5
(2,4)	4	3	7/6
(3,3)	4	2	6/6
(3,4)	4	3	7/7