



d	1	2	3	4	5
	0	10	50	30	40
visited	0	0	0	0	0
	1	1	1	1	1

$H = \{\}$

$H = \{(0, 1)\}$

$x = 1 ; H = \{\}$

1: 2 3 4

2: 3

3: 5

4: 5

5: -

$y = 2, \text{cost} = 10, d[2] > d[1] + \text{cost} \Rightarrow d[2] = 10$
 $H = \{(10, 2)\}$

$y = 3, \text{cost} = 50, d[3] = 50$
 $H = \{(50, 3), (10, 2)\}$

$y = 4, \text{cost} = 30, d[4] = 30$

$H = \{(30, 4), (50, 3), (10, 2)\}$

$x = 2, H = \{(30, 4), (50, 3)\}$

$y = 3, d[3] = 50 > d[2] + \text{cost} = 10 + 20 = 30 \Rightarrow d[3] = 30$
 $\text{cost} = 20$
 $H = \{(30, 4), (50, 3), (30, 3)\}$

$x = 3, H = \{(30, 4), (50, 3)\}$

$y = 5, \text{cost} = 10, d[5] > d[3] + 10 = 40$

$H = \{(30, 4), (50, 3), (40, 5)\}$

$x = 4, H = \{(50, 3), (40, 5)\}$

$y = 5, \text{cost} = 20, d[5] > 30 + 20 = 50$

$x = 5, H = \{(50, 3)\}$

S	1	2	3	4	5
d	0	10	30	30	40