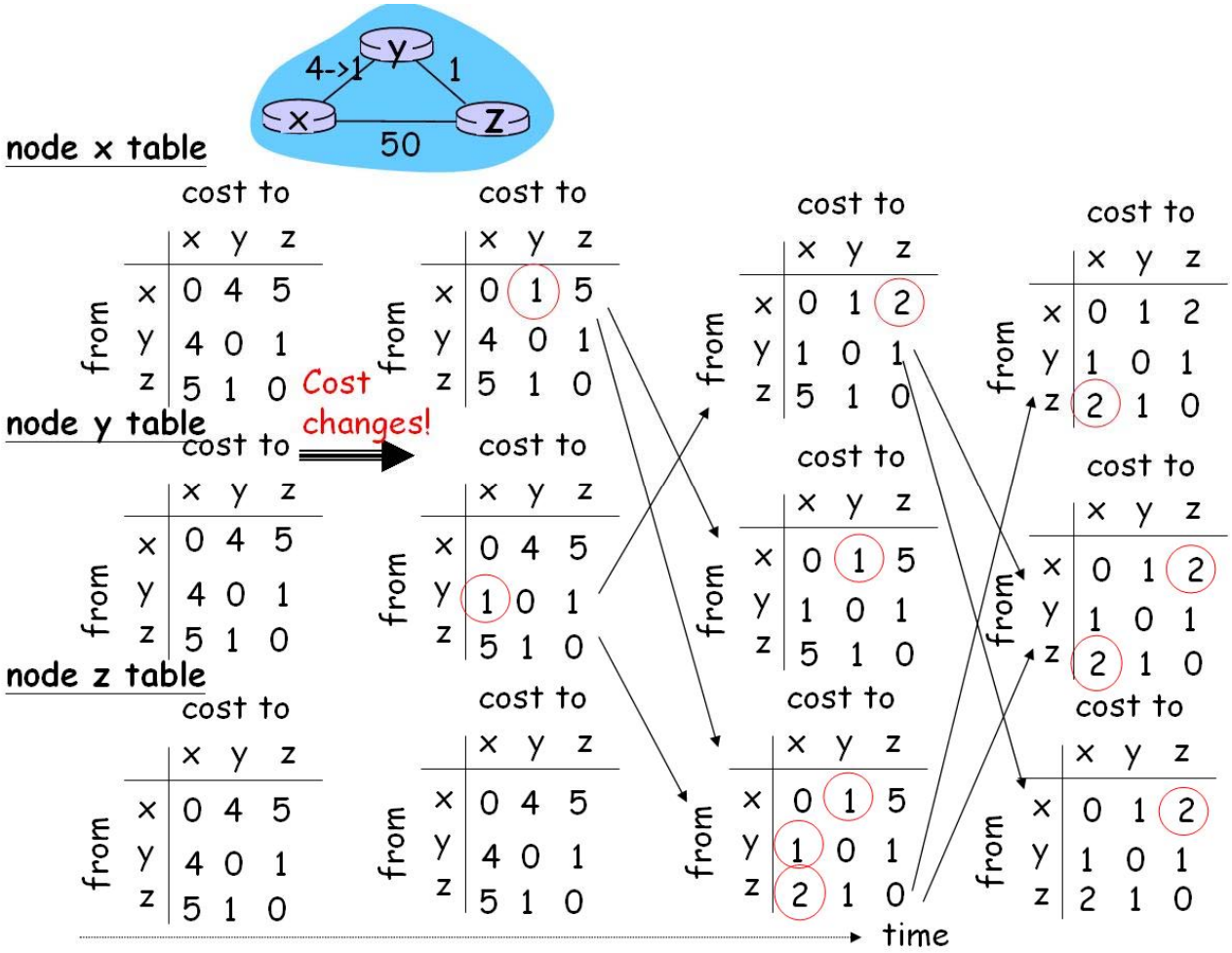
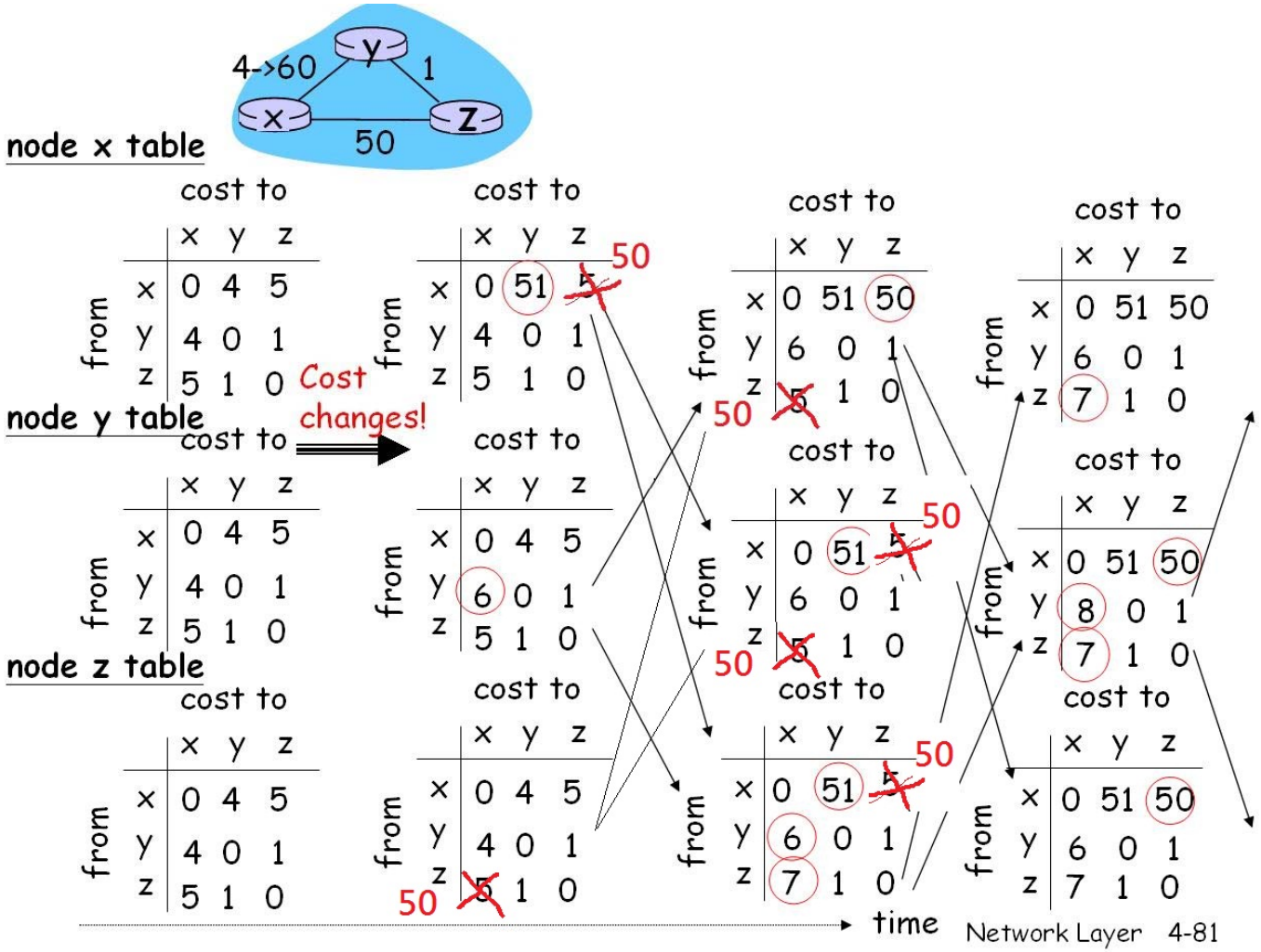
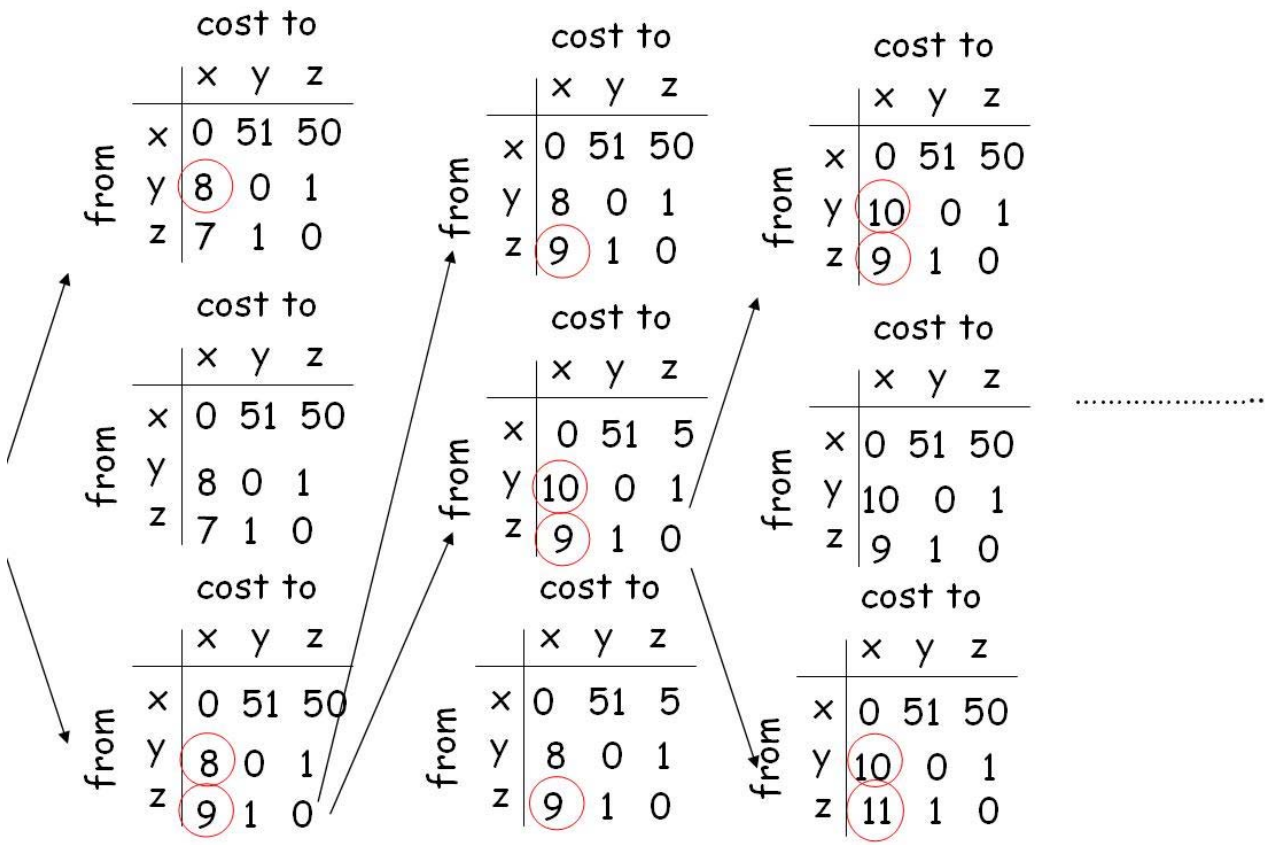
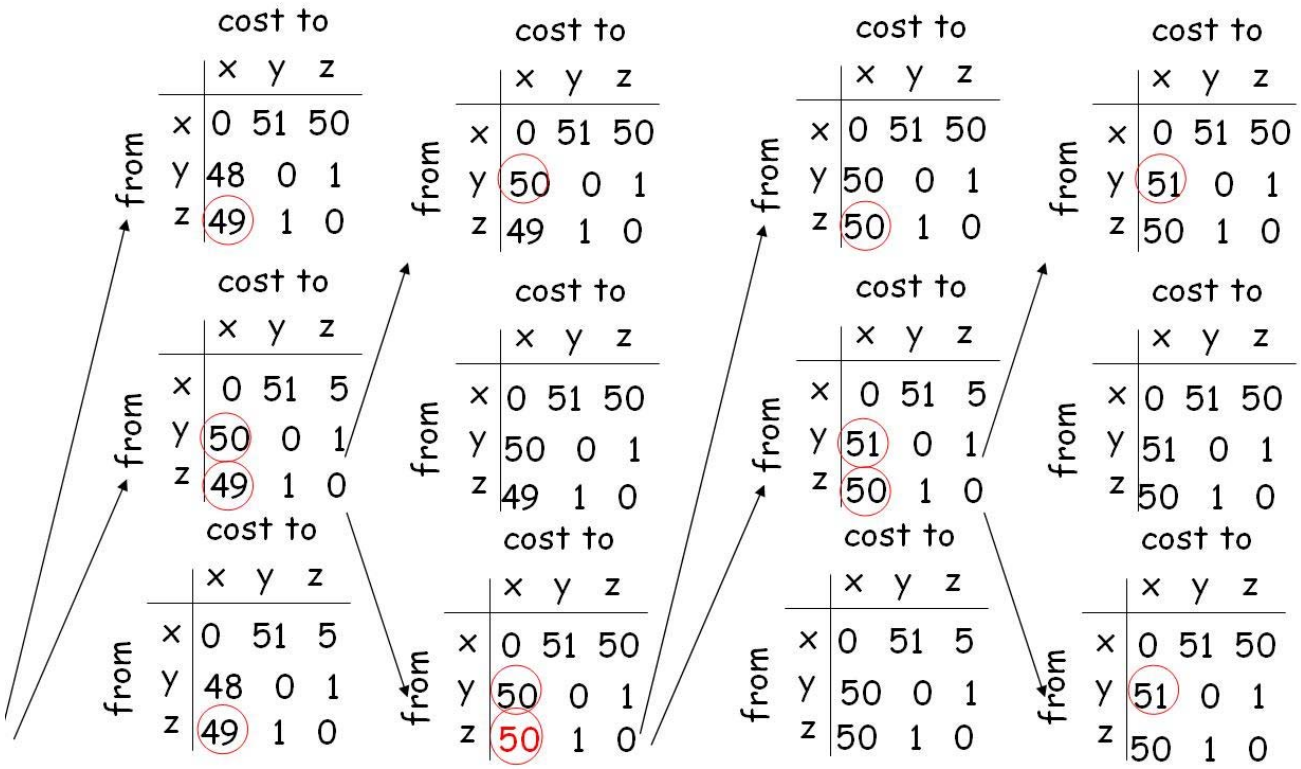
1. 4 -> 1


y
x
z
4->1
1
50
node x table
node y table
node z table
cost to
from
Cost changes!
time

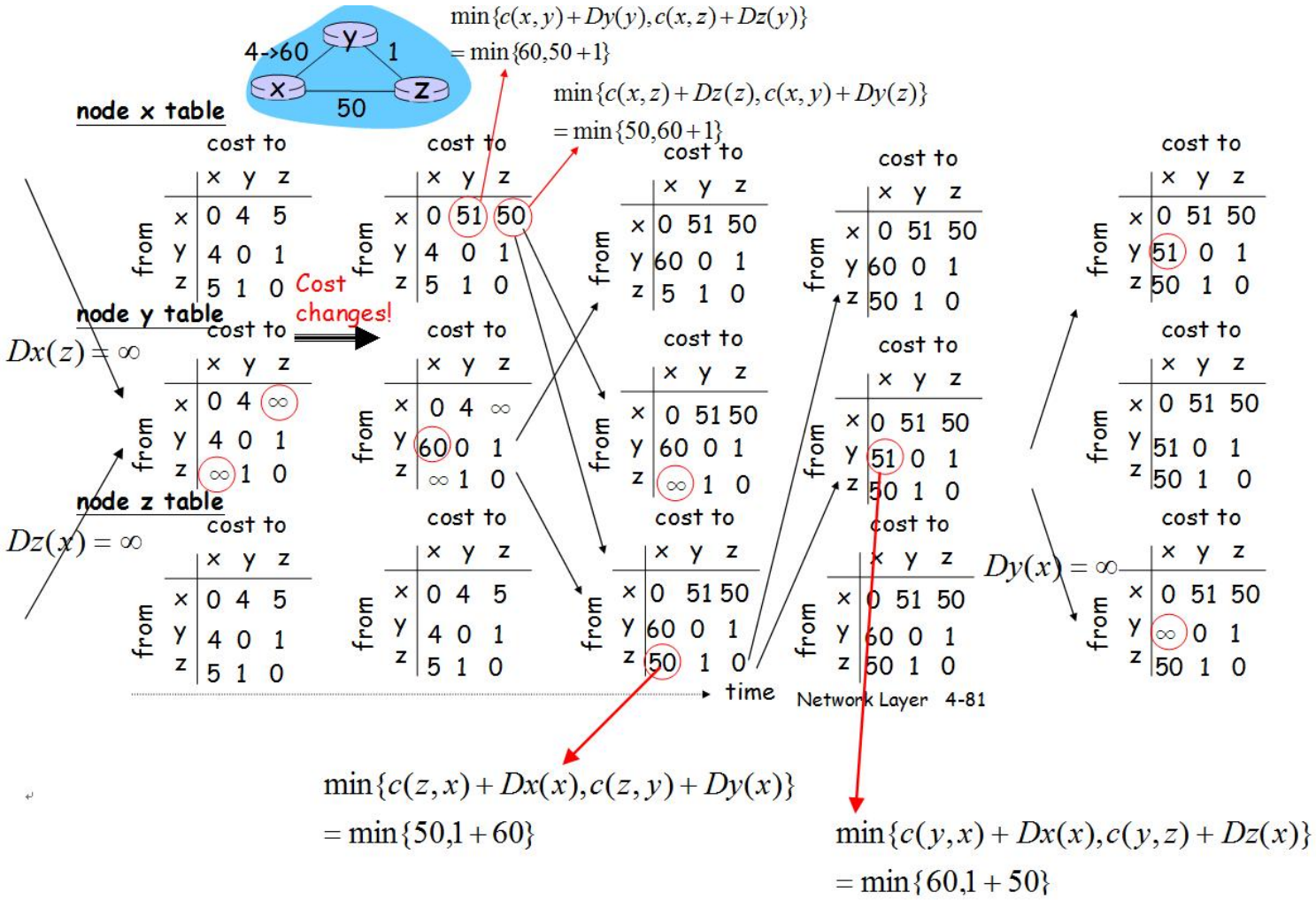
2. 4 -> 60 (Count to Infinity)


4->60
y
1
x
z
50
node x table
node y table
node z table
cost to
x y z
from
x 0 4 5
y 4 0 1
z 5 1 0
Cost changes!
x 0 51 50
y 4 0 1
z 5 1 0
x 0 4 5
y 6 0 1
z 5 1 0
x 0 4 5
y 4 0 1
z 5 1 0
x 0 51 50
y 6 0 1
z 5 1 0
x 0 51 50
y 8 0 1
z 7 1 0
x 0 51 50
y 6 0 1
z 7 1 0
x 0 51 50
y 6 0 1
z 7 1 0
50
time


cost to
x y z
from
x 0 51 50
y 8 0 1
z 7 1 0
cost to
x y z
from
x 0 51 50
y 8 0 1
z 7 1 0
cost to
x y z
from
x 0 51 50
y 8 0 1
z 9 1 0
cost to
x y z
from
x 0 51 50
y 8 0 1
z 9 1 0
cost to
x y z
from
x 0 51 5
y 10 0 1
z 9 1 0
cost to
x y z
from
x 0 51 5
y 8 0 1
z 9 1 0
cost to
x y z
from
x 0 51 50
y 10 0 1
z 9 1 0
cost to
x y z
from
x 0 51 50
y 10 0 1
z 9 1 0
cost to
x y z
from
x 0 51 50
y 10 0 1
z 11 1 0



3. Poisoned Reverse


y
x
z
4->60
1
50
node x table
node y table
node z table
cost to
from
Cost changes!
$Dx(z) = \infty$
$Dz(x) = \infty$
$Dy(x) = \infty$
$\min\{c(x,y) + Dy(y), c(x,z) + Dz(y)\}$
$= \min\{60, 50+1\}$
$\min\{c(x,z) + Dz(z), c(x,y) + Dy(z)\}$
$= \min\{50, 60+1\}$
$\min\{c(z,x) + Dx(x), c(z,y) + Dy(x)\}$
$= \min\{50, 1+60\}$
$\min\{c(y,x) + Dx(x), c(y,z) + Dz(x)\}$
$= \min\{60, 1+50\}$
time