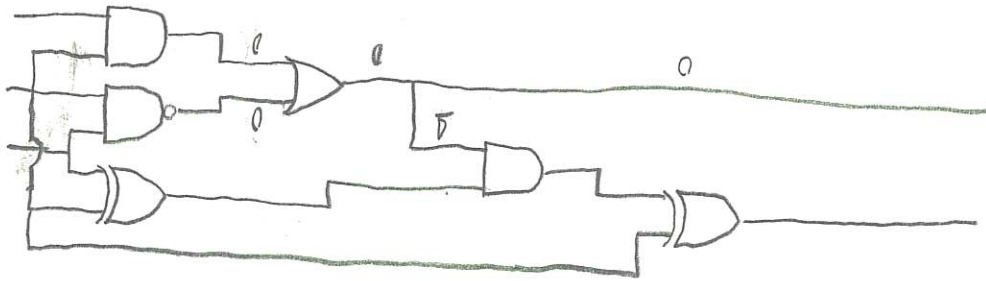
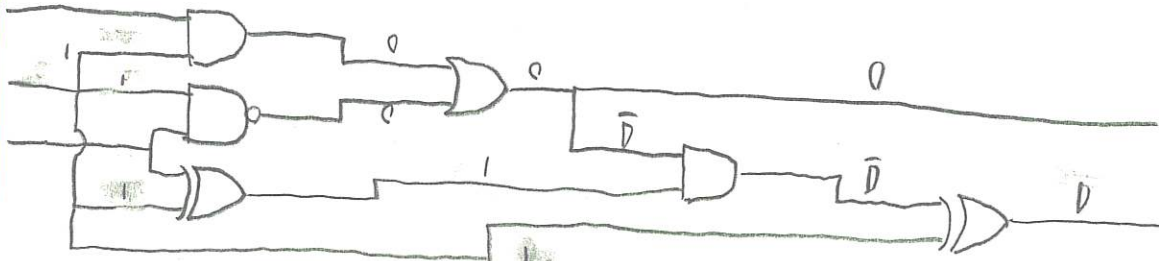


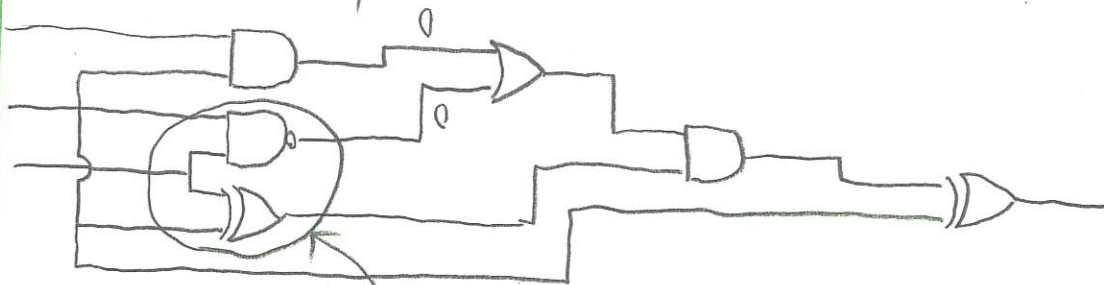
Step 1: Primary D-cube of failure



Step 2: Propagate



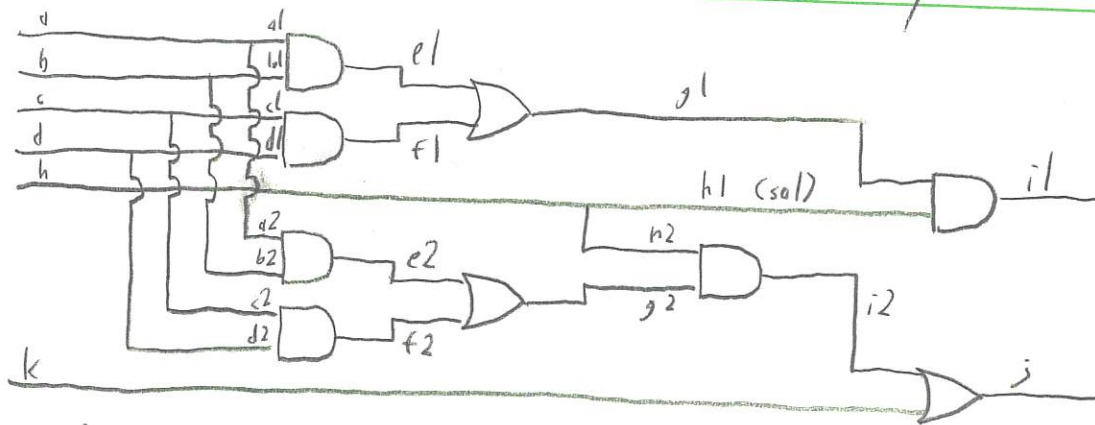
Step 3: Justify



this is
redundant
design

Fault is benign.

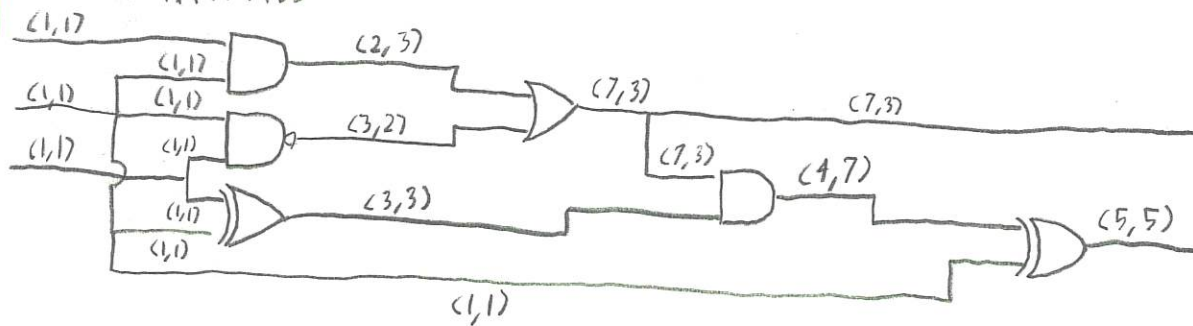
2



Step	Action	Nodes set
1	PDF	$h1 = \bar{D}$, $h = 0$, $h2 = 0$
2	Propagate	$i1 = \bar{D}$, $g1 = 1$
3	Justify	either $a=b=1$ and/or $c=d=1$ either way, $g2=1$ and $i2=0$

Test vectors are
 $[1 \ 1 \ X \ X \ 0 \ X]$
 and
 $[X \ X \ 1 \ 1 \ 0 \ X]$

3 Controllabilities:

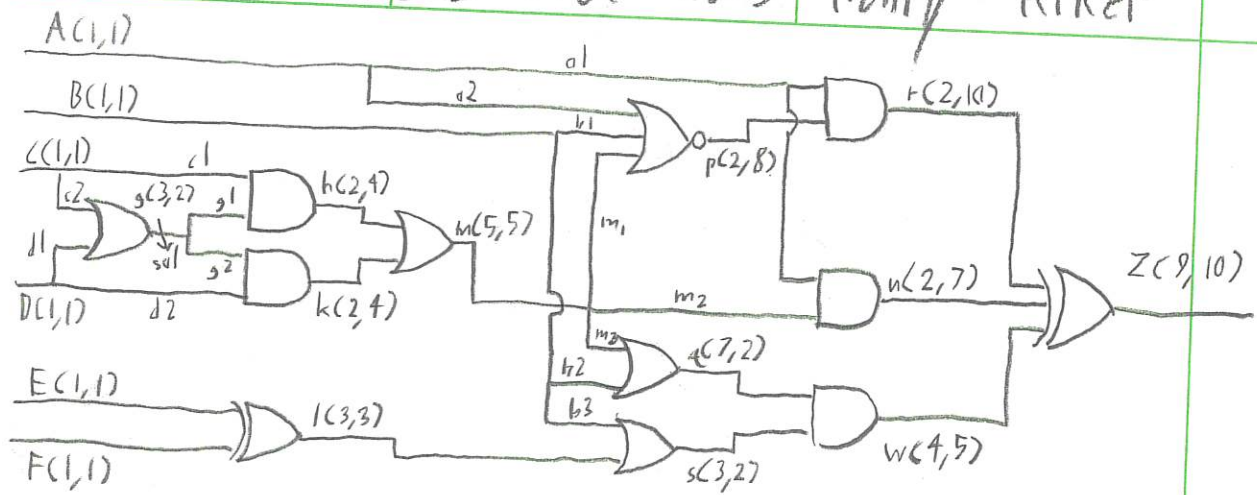


Step	Action	Nodes set
1	PDF	$h = \bar{D}, g = 0, Y = 0, d = 0, e = 0$
2	Propagate	$f = 1, k = \bar{D}, Z = ?$

At this point, we run into the same problem as part 1. Nodes B_4 and Z both have the same CC as their CI , we don't know whether to set B_4 to 1 and Z to $\bar{D}$ or B_4 to 0 and Z to $\bar{D}$.

Regardless, neither trace works, as the fault is benign.

4



Step | Action | Nodes set

1 PDF

2 Propagate

 $c2=0, d1=0, g=\bar{D}, C=0, D=0, g1=\bar{D}, g2=\bar{D}$

Fault is benign due to
redundant design at nodes
C, D, g, h, k, and m