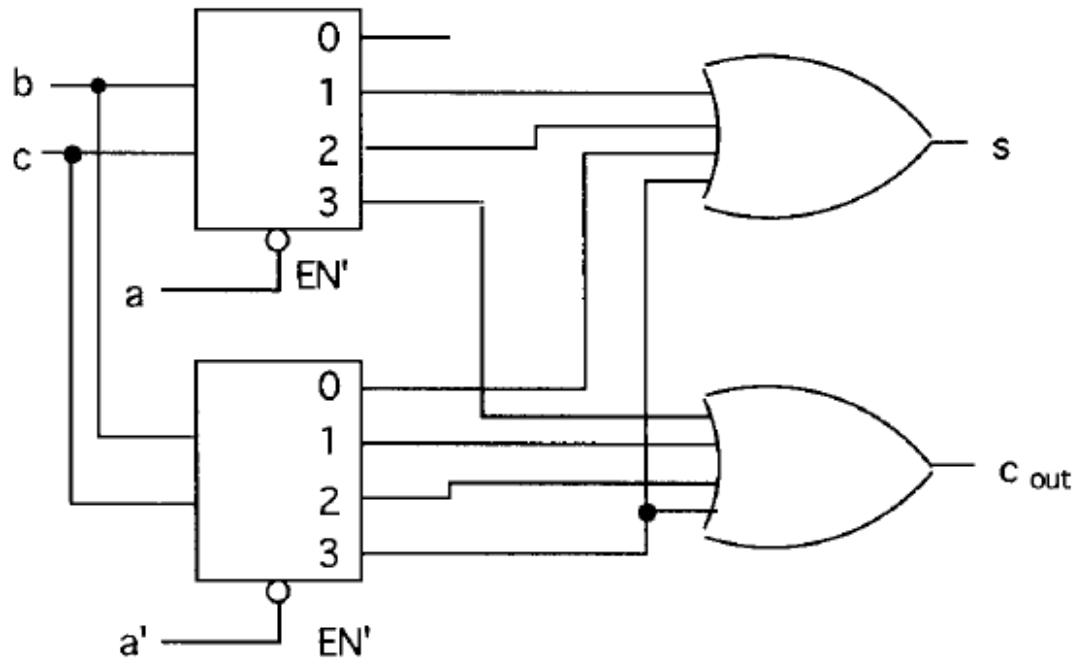
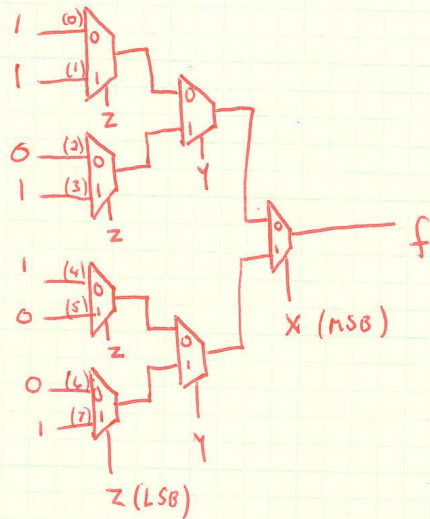


## Homework 12 Solutions

9.



12  
 IMP.  $f(x,y,z) = \sum m(0,1,3,4,7)$  Using 2:1 MUXes



13.

| A | B | C | D | F |
|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 1 | 0 |
| 0 | 0 | 1 | 0 | 0 |
| 0 | 0 | 1 | 1 | 0 |
| 0 | 1 | 0 | 0 | N |
| 0 | 1 | 0 | 1 | P |
| 0 | 1 | 1 | 0 | Q |
| 0 | 1 | 1 | 1 | R |
| 1 | 0 | 0 | 0 | S |
| 1 | 0 | 0 | 1 | T |
| 1 | 0 | 1 | 0 | U |
| 1 | 0 | 1 | 1 | V |
| 1 | 1 | 0 | 0 | W |
| 1 | 1 | 0 | 1 | X |
| 1 | 1 | 1 | 0 | Y |
| 1 | 1 | 1 | 1 | Z |