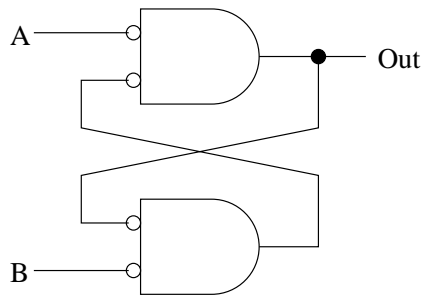


Transparent Latches

Part A

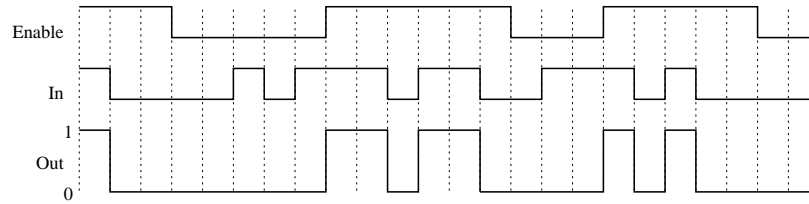


A	B	Out
0	0	Q ₀
1	0	0
0	1	1
1	1	0 (unstable)

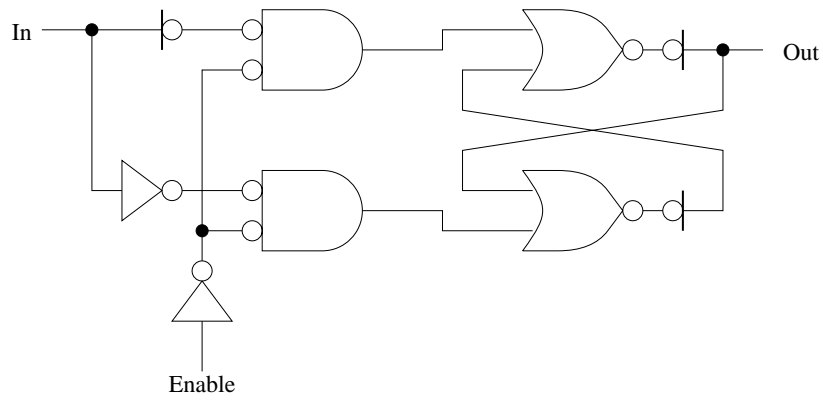
Part B

$$(2 \times 4) + (2 \times 6) + (1 \times 2) = 22 \text{ transistors}$$

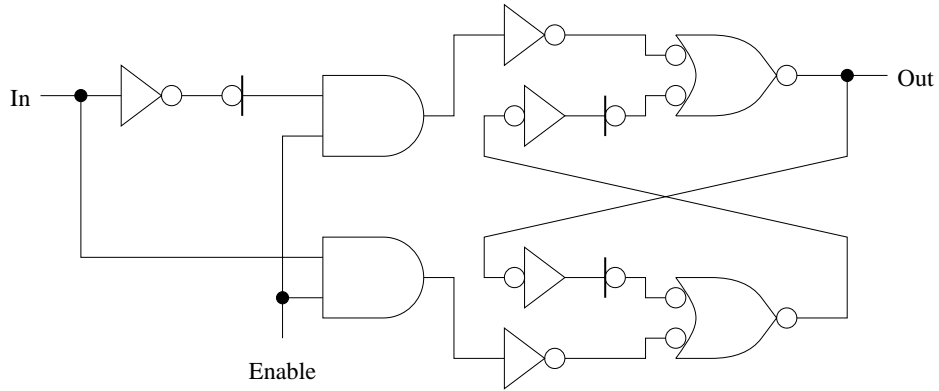
Part C



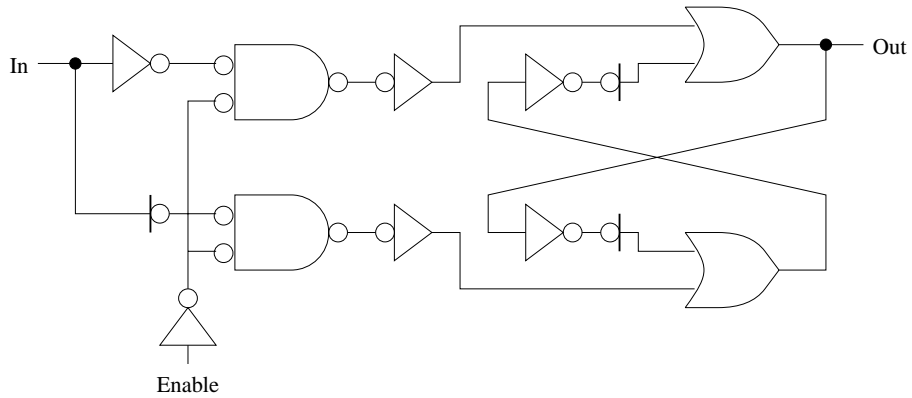
Part D



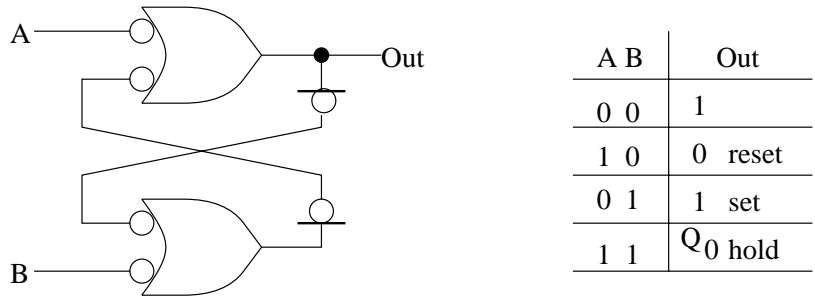
Part E



Part F



Part G



Part H

$4 \times 4 + 1 \times 2 = 18$ transistors

Part I

