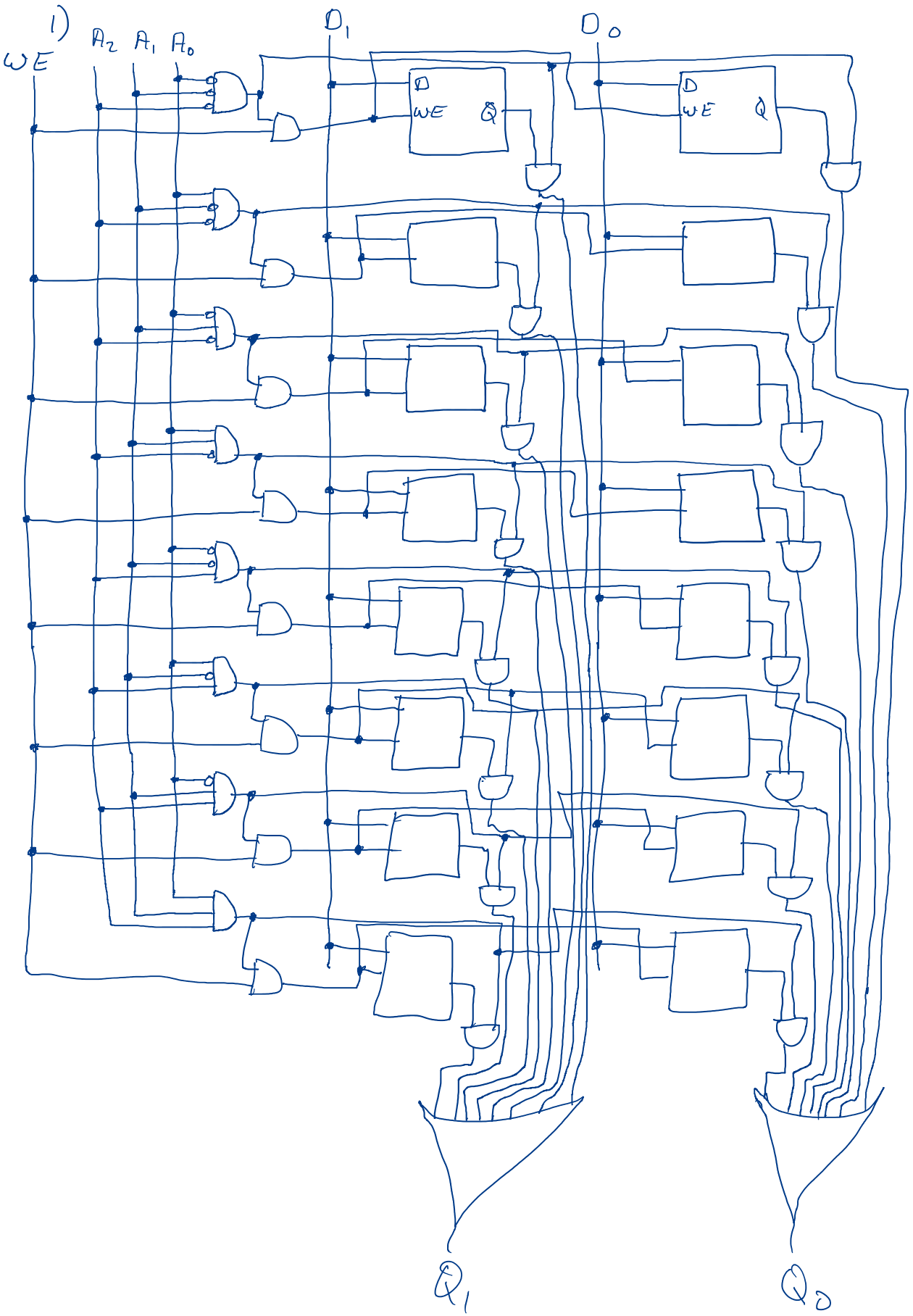
2280 A3 Solutions



2) Need 32/8 = 4 chips for each word

Need 64/16 = 4 rows

# of chip/word/row select lines:
$\log_2 4 = 2$

# of chip offset lines:
$\log_2 16k = 14$

addr lines = 2 + 14 = 16 (which is also $\log_2 64k$)

byte addressing requires 2 additional lines/bits to select each byte in a word
∴ need 16 + 2 = 18 lines