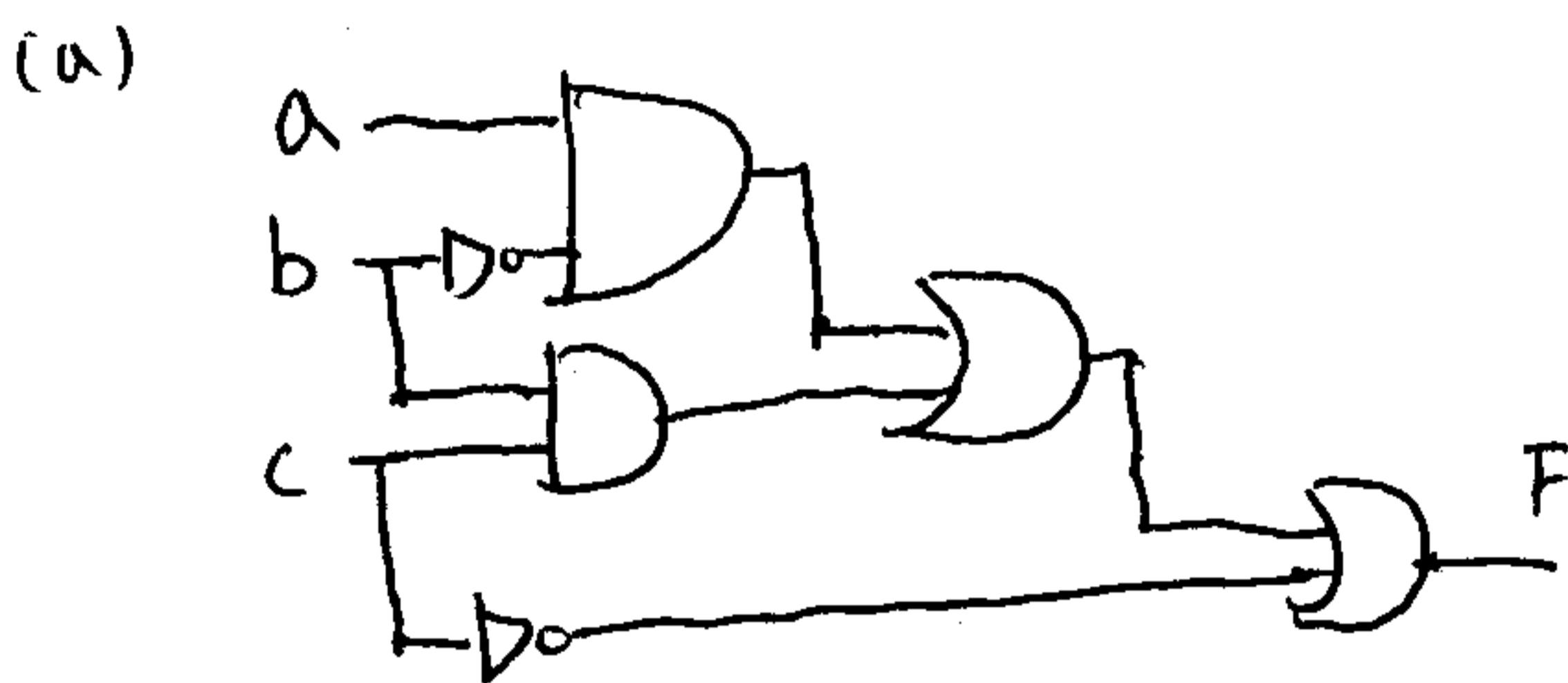


2.9 (a) OR (b) AND (c) NOT

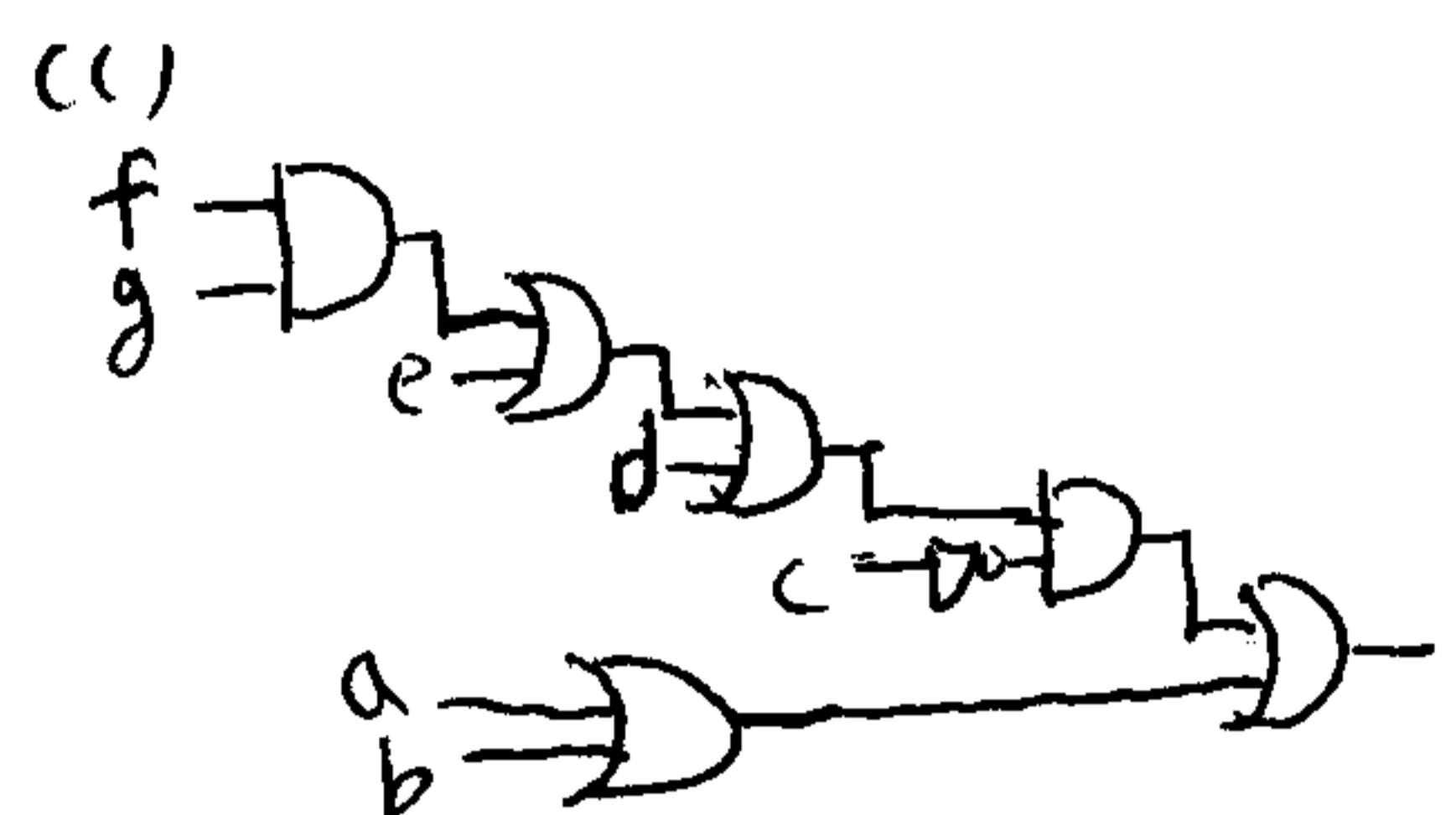
$$2.11 \quad (\text{a}) \quad c = 1 \quad J_0 = 1 \quad (\text{d}) \quad d = 1 \quad J_0 = 1$$

$$2.13 \quad (b) \quad a = 0 \quad \therefore \quad 0 \quad (c) \quad b, c, d = 0 \quad \therefore \quad 0$$

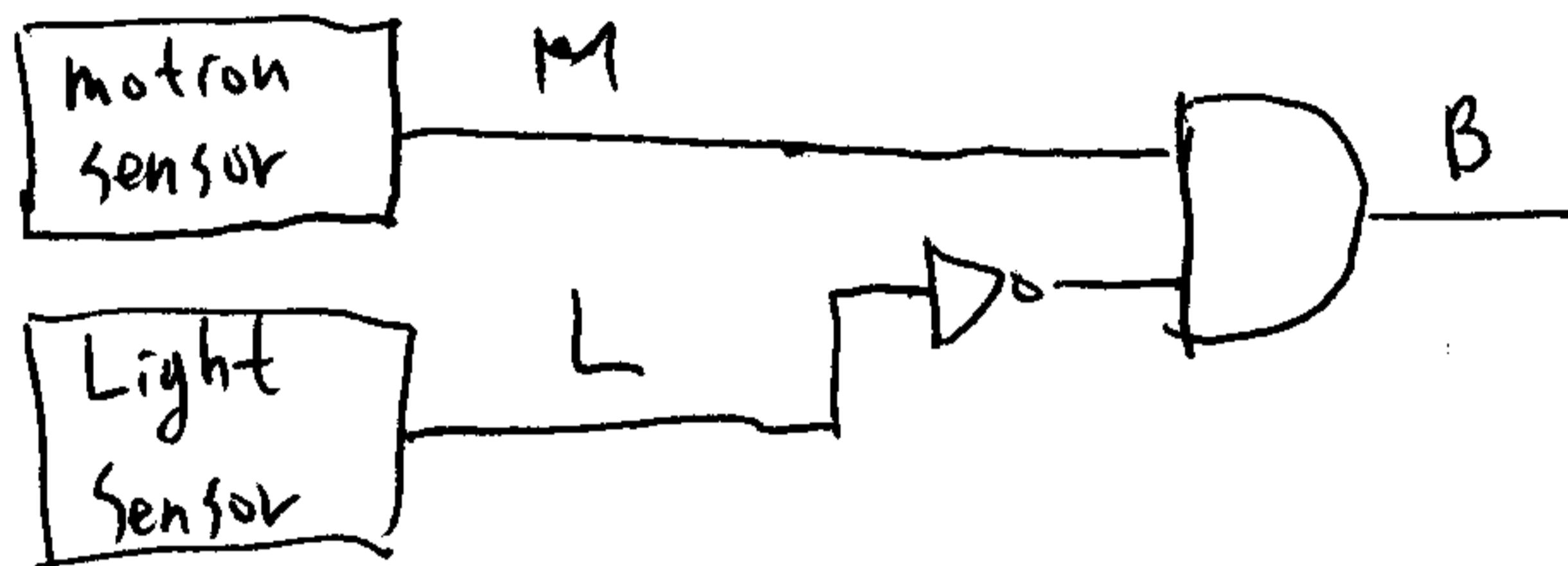
2.16                  2.12



2. 18



2.19



2, 21

$$F = M + M'L$$

2,24

$$(a) T \cdot H' + T' \cdot H \quad (b) (H \cdot T + T \cdot H)' = (T \cdot H) (T + H') = TH + T'H'$$

2,27

$$a'b'c + a'b'd' + ab' + ac + abc + adc = a'b'c + a'b'd + ab' + ac$$

2,29

$$(ac' + abd' + acd)' = (a' + c') (a' + b' + d) (a' + c' + d')$$

$$= a' + c(b'+d)(c'+d')$$

$$= a' + (cb' + cd)(c'+d')$$

$$= a' + (cb'c' + cb'd' + cdc' + cdd')$$

$$= a' + \overline{c}b'd'$$