Q1. Reduce using K-map and draw the logic gate diagram for the reduced expression:

$$F(A,B,C,D) = \Pi(0, 1, 2, 3, 12, 13, 14, 15)$$

Q2. Reduce using K-map and draw the logic gate diagram for the reduced expression:

$$F(X, Y, Z) = \Pi(0, 2, 3, 4, 6)$$