Use K-maps to find an appropriate sum-of-products expression for the Boolean functions defined below. Try to find the simplest expression:

(1) \( F(x, y, z) = \Sigma(0, 1, 2, 4, 5, 6) \)
(2) \( F(a, b, c) = \Sigma(2, 3, 4, 5, 7) \)
(3) \( F(x, y, z) = \Sigma(0, 1, 2, 3, 7) \)
(4) \( F(A, B, C, D) = \Sigma(0, 2, 8, 10) \)
(5) \( F(A, B, C, D) = \Sigma(0, 1, 2, 3, 5, 7, 8, 13, 15) \)
(6) \( F(w, x, y, z) = \Sigma(0, 2, 3, 4, 6, 10, 13, 15) \)
(7) \( F(w, x, y, z) = w'x + xyz + x'y + x'y'z \)
(8) \( F(A, B, C, D) = ABD + AB'D' + ACD' + A'BC' + A'BCD + B \)