

Minimizzare le seguenti espressioni utilizzando i teoremi dell'algebra di Boole.

$$F = \overline{(A + \underline{D})(AB + C) + (\underline{A}BD) + (\underline{C}BA(CD + AB)) + (B + \underline{D})(\underline{A} + D)}$$

$$F = \overline{(B + \underline{A}) + (AB + C) + (AB\underline{A}) + (\underline{A}BC) + (A + B)(\underline{A} + C)}$$

$$F = \overline{(\underline{A}D + (AB + C\underline{D}\underline{A})(B\underline{A}C + \underline{B}D))(\underline{D}ACB + D\underline{B} + AB)}$$

$$F = \overline{AB(\underline{A}C + \underline{B}D)(\underline{A}C + \underline{B}D) + D + \underline{A} + C(AD + \underline{A}D)}$$