

1 QUESTION

The Boolean expression $F(X,Y,Z) = (\overline{X}Y\overline{Z}) + (X\overline{Y}\overline{Z}) + (XY\overline{Z}) + (X + Y + Z)$ converted into the canonical product of sum (POS) form is

2 ANSWER

$$(\overline{X}Y\overline{Z}) + (X\overline{Y}\overline{Z}) + (XY\overline{Z}) + (XYZ) = (X + Y + Z)(X + Y + \overline{Z}) + (X + \overline{Y} + \overline{Z})(\overline{X} + Y + \overline{Z}) = F$$

2.1 COMBINATIONAL CIRCUIT

