

98511210V

علیہ السلام

1

$$\begin{array}{r} 1010100 \\ - 1001100 \\ \hline 001000 \end{array}$$

→

$$\begin{array}{r} 1010100 \\ + 0110011 \\ \hline 1000011 \end{array}$$

$$\begin{array}{r} 1010100 \\ - 0010011 \\ \hline 1000001 \end{array}$$

$$\begin{array}{r} 1000011 \\ - 0101000 \\ \hline 0111011 \end{array}$$

$$\begin{array}{r} 0111011 \\ - 0101000 \\ \hline 0010011 \end{array}$$

$$\begin{array}{r} 1001100 \\ + 0101011 \\ \hline 1110111 \\ - 1000000 \\ \hline 0110111 \end{array}$$

2

$$xy + yz + xz = (x+y)(y+z)(x+z)$$

$$(x+y)(y+z)(x+z) = (xy + yz + xz + y^2 + z^2 + x^2 + xy + yz + xz) = xy + yz + xz$$

$$(x+y)(y+z)(x+z) = (x'y' + x'z' + y'z' + y^2 + z^2 + x^2 + xy + yz + xz) = xy + yz + xz$$

$$\begin{aligned} (2) \quad xy + yz + xz &\Rightarrow \hat{f} = (x+y)(y+z)(x+z) \\ &= \hat{f} = (x' + y')(y' + z')(x' + z') \end{aligned}$$

$$4) f(x, y, z) = xy' + x'yz + yz'$$

$$\text{Ans: } f' = xy'(z+z') + x'yz + yz'(x+x')$$

$$= \cancel{xyz} + \cancel{xyz'} + xy'z + xy'z' + x'yz + yz'x + \underbrace{yz'x'}_{x'yz'} = f(x, y, z) = \underbrace{xyz'}_{x'yz'}$$

$$\Sigma(m_5, m_4, m_3, m_6, m_2) = \text{f} = \pi(0, 1, 7)$$

$$\Sigma(2, 4, 6, 3, 8, 5)$$

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