$F(x,y,z) = yz - \ln(x+z) \quad \Rightarrow \quad \nabla F(x,y,z) = \left\langle -\dfrac{1}{x+z}, z, y - \dfrac{1}{x+z} \right\rangle$
and $\nabla F(0,0,1) = \langle -1, 1, -1 \rangle$.

(a) $(-1)(x-0) + (1)(y-0) - 1(z-1) = 0$ or $x - y + z = 1$

(b) Parametric equations are $x = -t$, $y = t$, $z = 1 - t$ and symmetric equations are $\dfrac{x}{-1} = \dfrac{y}{1} = \dfrac{z-1}{-1}$ or $-x = y = 1 - z$.