S.2450 If $x, y, z > 0$**, then:**

$$\frac{x}{(x+1)(z+1)} + \frac{y}{(y+1)(x+1)} + \frac{z}{(z+1)(y+1)} + \frac{xyz+1}{(x+1)(y+1)(z+1)} = 1.$$

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Clearing denominators, the desired indentity is equivalent to

$$x(y+1) + y(z+1) + z(x+1) + xyz + 1 = (x+1)(y+1)(z+1)$$

$$xy + x + yz + y + zx + z + xyz + 1 = xyz + xy + xz + x + yz + y + z + 1,$$

which is true.