

$$\frac{\partial f}{\partial A} = \frac{1}{2} (BC(A+B+C) - ABC(B+C))$$

$$\frac{\partial f}{\partial B} = \frac{1}{2} (AC(A+B+C) - ABC(A+C))$$

$$\frac{\partial f}{\partial C} = \frac{1}{2} (AB(A+B+C) - ABC(A+B))$$

Nur die Zähler = 0, Gleichungen schon durch BC, AC, AB

dividiert

$$(1) \quad AB + AC + BC - A(B+C) = 0$$

$$(2) \quad AB + AC + BC - B(A+C) = 0$$

$$(3) \quad AB + AC + BC - C(A+B) = 0$$

$$\left. \begin{array}{l} (1) - (2): BC = AC \Rightarrow A = B \\ (1) - (3): BC = AB \Rightarrow A = C \end{array} \right\} \Rightarrow A = B = C$$