

$$w(t) = t \log t \quad \log^+(t) = \begin{cases} \log t & t > 1 \\ 0 & \text{sonst} \end{cases} \quad (6)$$

$$w'(t) = \begin{cases} -(1 + \log t) & t < 0 \\ 0 & \text{sonst} \end{cases}$$

$$I(\alpha) = \int_0^{\infty} (\alpha_0 + f(t)) t^s w((at)^{s-1}) \frac{dt}{t}$$

$$t \rightarrow t/\alpha \quad I(\alpha) \downarrow$$

$$I'(\alpha) = (s-1) \alpha^{s-2} \int_0^{\infty} (\alpha_0 + f(t)) t^s w((at)^{s-1}) \frac{dt}{t} \stackrel{!}{=} 0$$

$$(s-1) \alpha^{s-2} \alpha_0 \int_0^{\infty} t^s (1 + \log((at)^{s-1})) \frac{dt}{t}$$

$$\stackrel{!}{=} - \int_0^{\infty} f(t) t^s (1 + \log((at)^{s-1})) \frac{dt}{t}$$

$$\stackrel{!}{=} - (1 + (s-1) \log a) D(s) + (s-1) D'(s)$$

aus rechenprogramm $\alpha_0 \geq \dots$ ~~0~~

maximale gibt Formel.

