

$$f_1(z) = \underbrace{(e^{z^2} - 1)}_{z^2} =$$

$$= \left(\sum_0^{\infty} \frac{z^{2m}}{m!} - 1 \right) z^2 = \sum_1^{\infty} \frac{z^{2m+2}}{m!} = \quad \parallel g(z)$$

$$= z^4 + \frac{z^6}{2!} + \frac{z^8}{3!} + \dots$$

\uparrow
 4

$$= z^4 \left(1 + \frac{z^2}{2!} + \frac{z^4}{3!} + \dots \right)$$

f. całkowita,
w zera równa 1

f_1 ma zero krotności 4 w zera

$$f(z) = z^m \cdot g(z), \quad g \in H(D(0,r)), \quad g(0) \neq 0$$