Problem 2

a. $f(x) = (x)(x^2 - x + 1)(x^3 - x^2 + 1)(x^4 - x^3 + 1)...$

b. $f(0) = 0$ and $f(1) = 1$

c. $ln((1-x)x^i)$
$ln(1-x) + i * ln(x)$
when $x \approx 0$:
$-x + i * lnx$
$i * ln - x^2$
$2i * ln(x) + ln(-1)$
???