marcus something

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Contents

Chapter 1

homewor

1.1 confirm the following property of the gcd

Oppgave Confirm the following property of the gcd

(a) Prove that if $d|n$, then $\left(2^d - 1\right) \mid \left(2^n - 1\right)$ using $dk = n$, $2^{dk} - 1 = 2^n - 1 = \left(2^d\right)^k - 1$ Using the expansion $2^x - 1 = (x - 1)\left(1 + x + x^2 + \cdots + x^{n-1}\right)$ We want to show