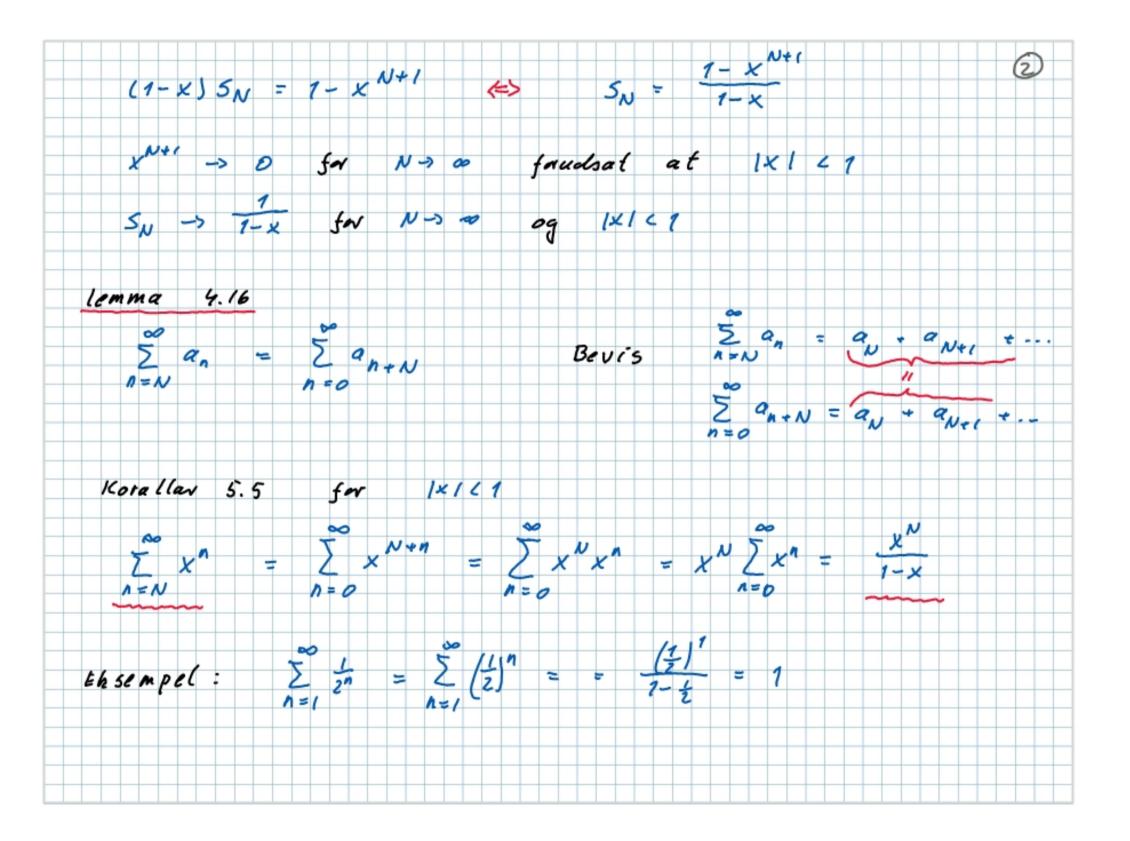
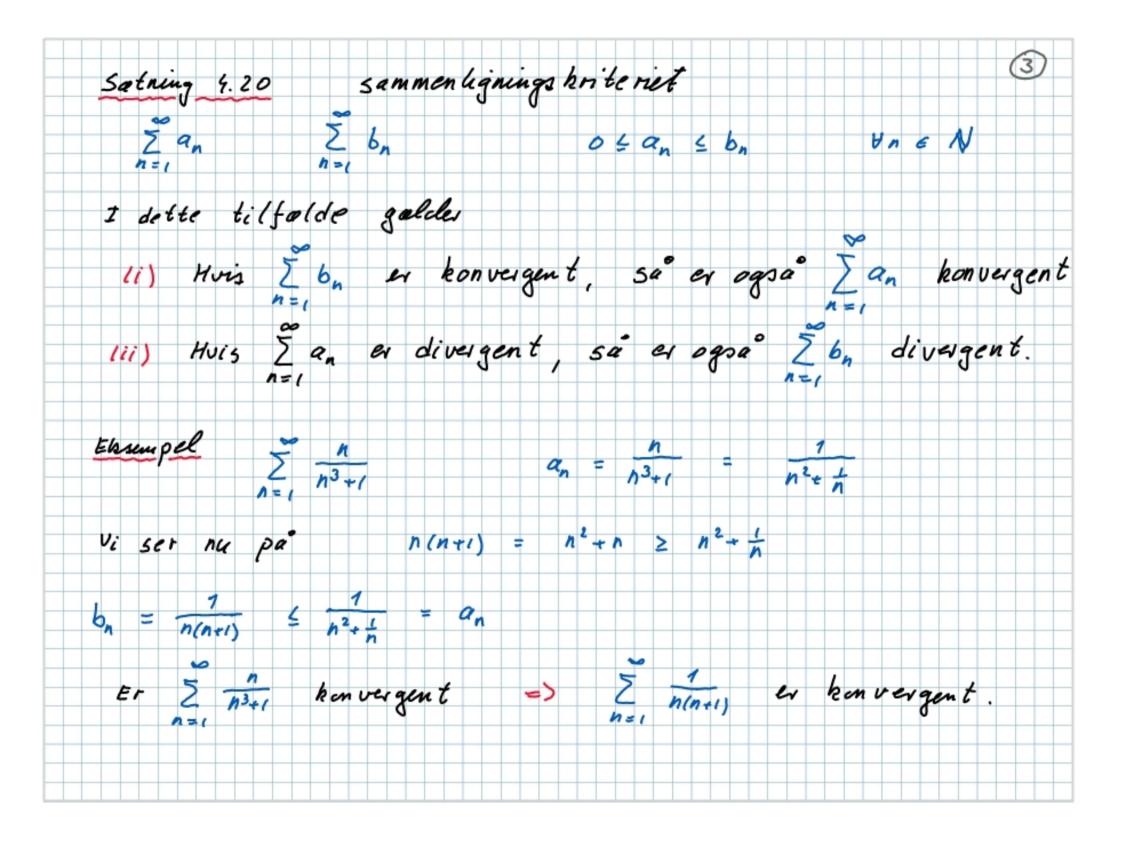
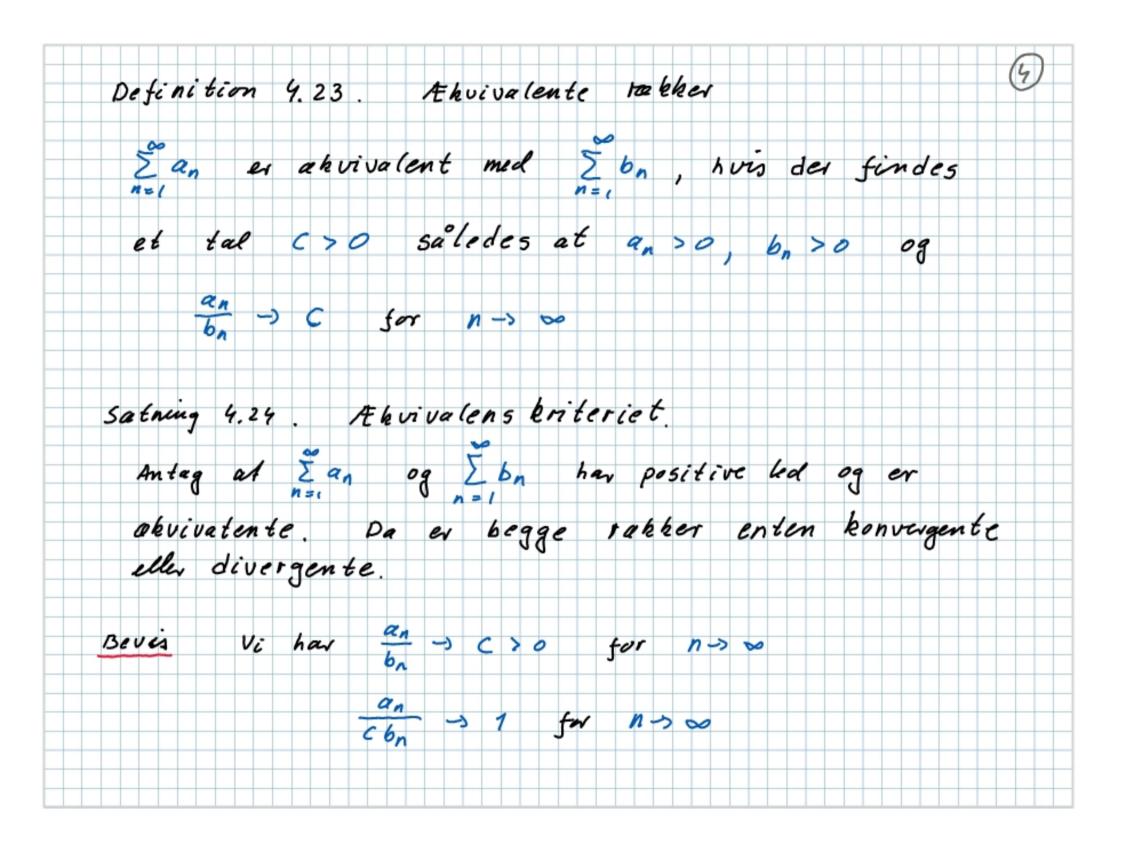
Fore lasning	5	Kvotientra		
		Konvergens	kriterier	
Definition 5.1	, kvotientr	rube		
2 X -	7 + X + X ² +	·-· × * · · ·	X kal	des kvolienter
Satning 5.2.	Konvergens	af en kvot	ientrak he	
50 X M W	konvergent,	hvis og kun	huis IXI < 1	og i dette
tilfælde	00			
	Σ X	1 = 7-X		
Beui's . SN =	\(\sum_{n} = 1	+ X + X +	+ X	
	N=0			
x SN =	5 x n+1 =	x + x 2 +	+ X ^N	+ X N+1
5N - X 5N		+1		







I N & N saledes at for n > N $\frac{1}{2} \leq \frac{a_n}{6a_n} \leq 1 + \frac{1}{2} = \frac{3}{2}$ $|\frac{a_n}{cb_n} - 1| \le z = \frac{1}{2}$ $\frac{c}{2}b_n \leq a_n \leq \frac{3}{2}cb_n$ Sammen hønings kniteriet giver nu resultatet i satn. 4.24. Ebsempel (Ebsamen maj 2012)

Det oply ses al R. $\sum_{n=1}^{\infty} \frac{1}{n}$ ev divergent. $b_n = \frac{1}{n}$ $R_2: \sum_{n=0}^{\infty} \sin(\frac{\pi}{n})$ $a_n = \sin(\frac{\pi}{n})$ v_i has $\frac{a_n}{b_n} = \frac{\sin(\frac{1}{n})}{1} \rightarrow 1$ for $n \rightarrow \infty$ De 2 rakker R, og R, ex abvivalente. Heraf følger at R, ex divergent.

De finition	4.26	Absolut	kon vergen 5		(6)
		bon vergen	t sæfremt	\(\sqrt{19n1 er} \)	kan vergent.
Sælning 4.	2 7				
Hvis 5 a,	4 26 50	lut konve	ugent, sa'	er Zan bi	on vergen t.
Endvidere	er 1 2 an	1 4	>		
Definition 4					
2 an	siges at ver	e betinget	konvergent,	sa from t	
\(\frac{2}{2} a_n \\ n=1 \)	er konverg	ent og	2 1an 1 ex	divergent.	
thsem pel	R ₃ :	00 (nTT)	1 = 50 (-	-1) n 1 = 50 5 n = 1	(=1)"
$\alpha_n =$	(-1) N vi	betragter	$\sum_{n=1}^{\infty} a_n = 2$		
	ev	en konverge		the da 5	< 1

