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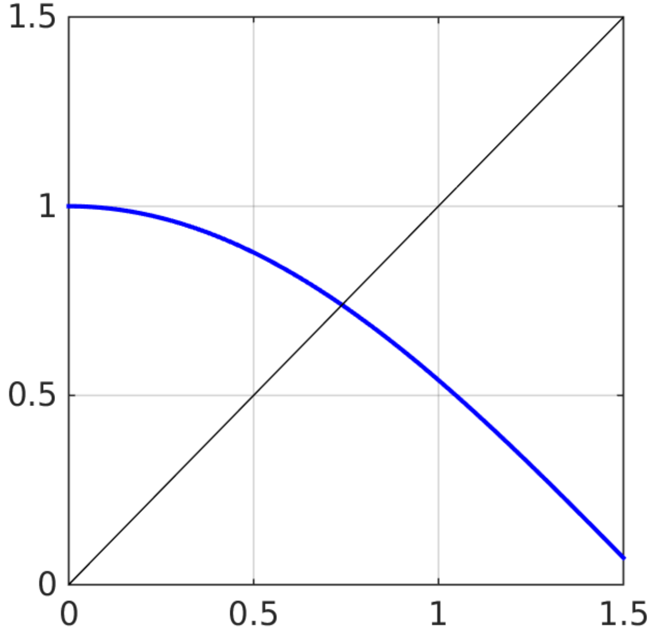

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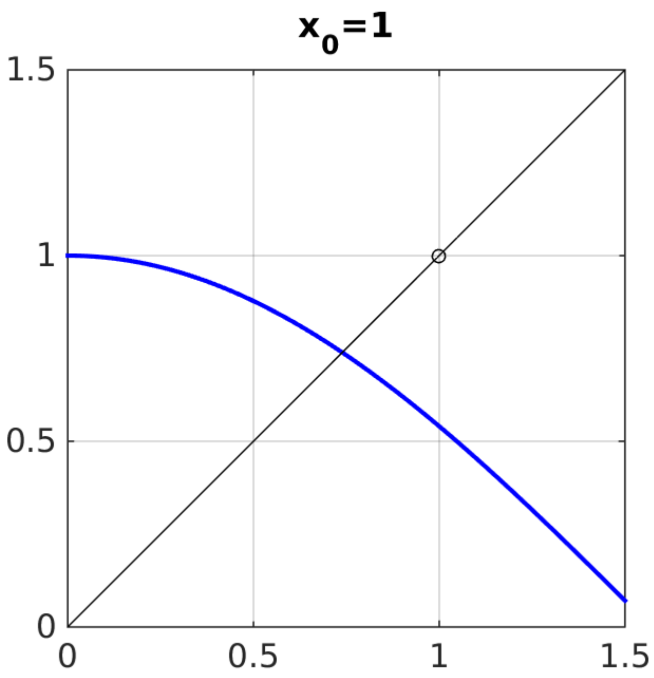

x=1?

Kva *er* numeriske metodar?

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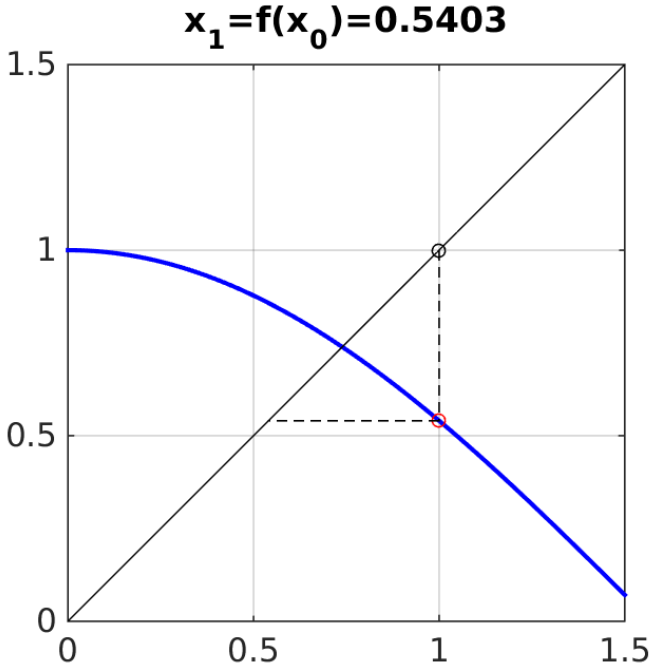

cos(1)=0.5403

Kva *er* numeriske metodar?

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$$x = \cos x$$

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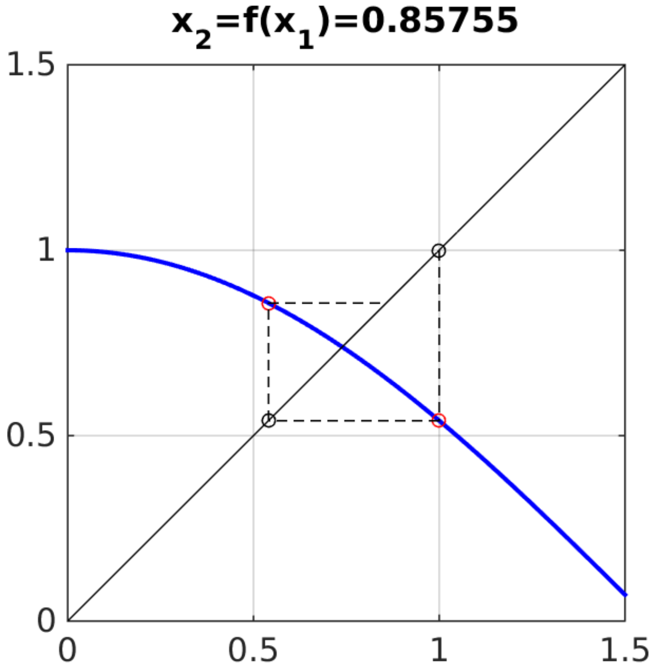

cos(1)=0.5403
cos(0.5403)=0.8576

Kva *er* numeriske metodar?

To eksempel:

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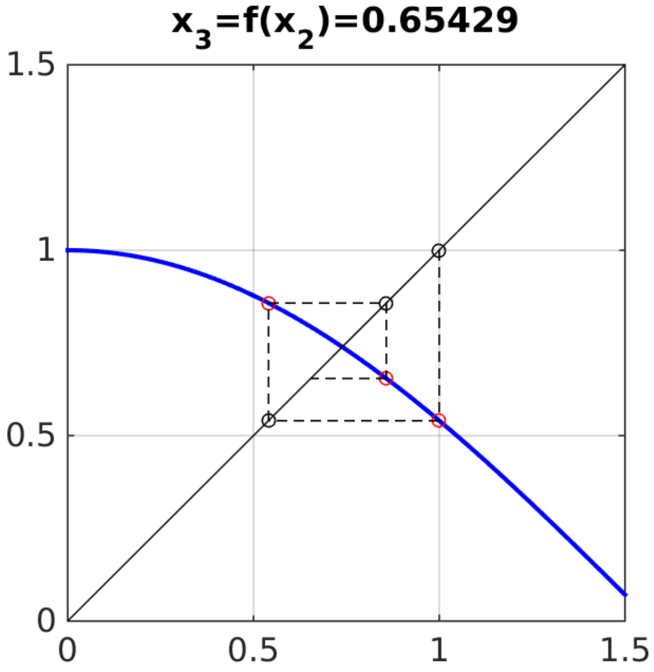

cos(1)=0.5403
cos(0.5403)=0.8576
cos(0.8576)=0.6543

Kva *er* numeriske metodar?

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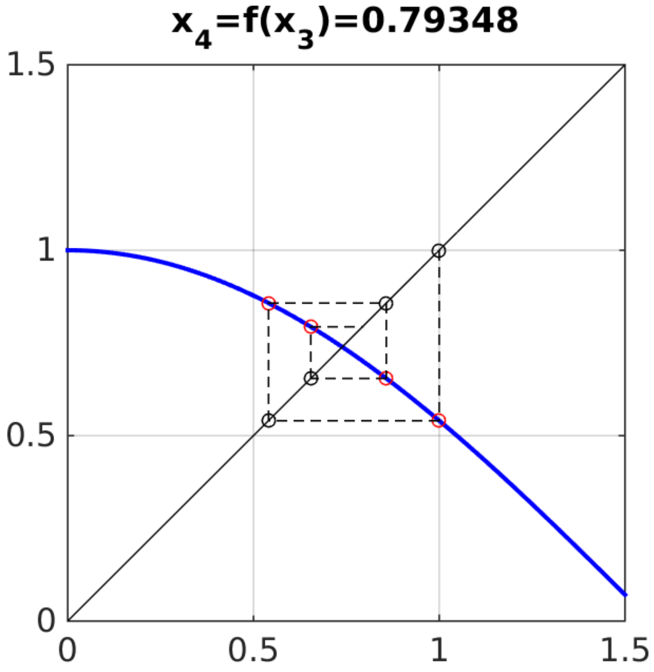
$$\int_{0.5}^{1.5} \sin x^2 \, dx$$



cos(1)=0.5403
cos(0.5403)=0.8576
cos(0.8576)=0.6543
cos(0.6543)=0.7935

Kva *er* numeriske metodar?

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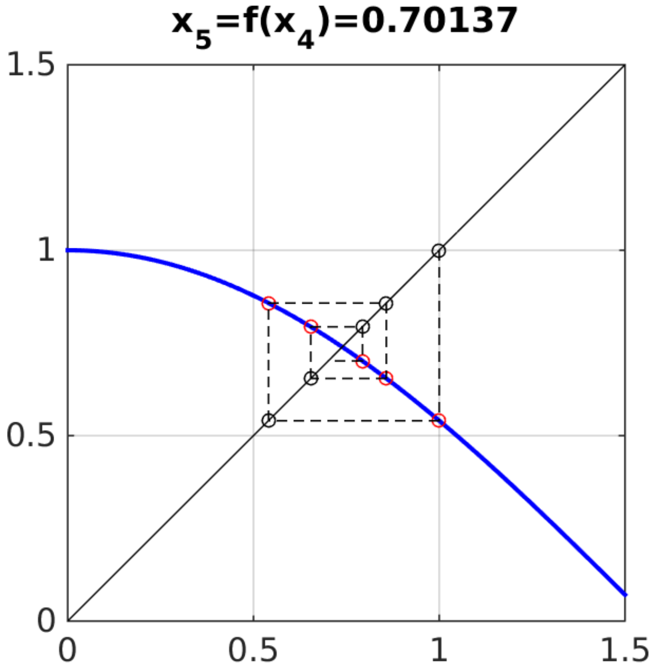
$$\int_{0.5}^{1.5} \sin x^2 \, dx$$



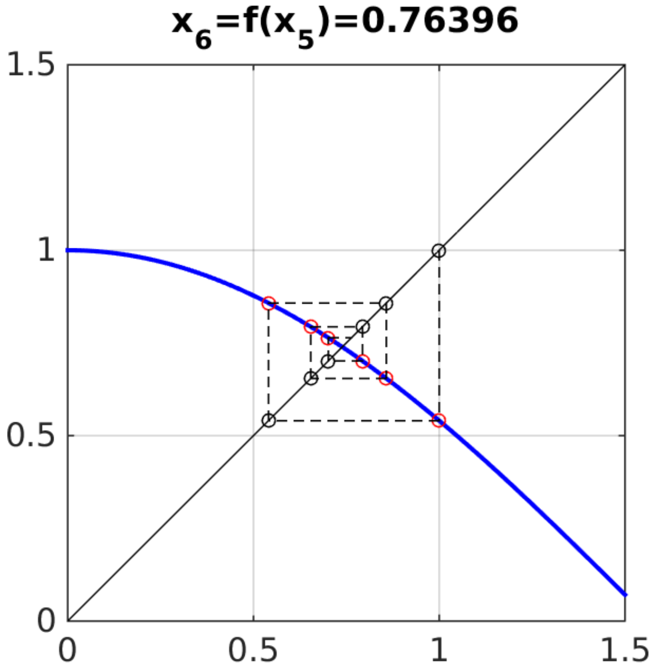
cos(1)=0.5403
cos(0.5403)=0.8576
cos(0.8576)=0.6543
cos(0.6543)=0.7935
cos(0.7935)=0.7014

Kva *er* numeriske metodar?

To eksempel:

$$x = \cos x$$

$$\int_{0.5}^{1.5} \sin x^2 \, dx$$



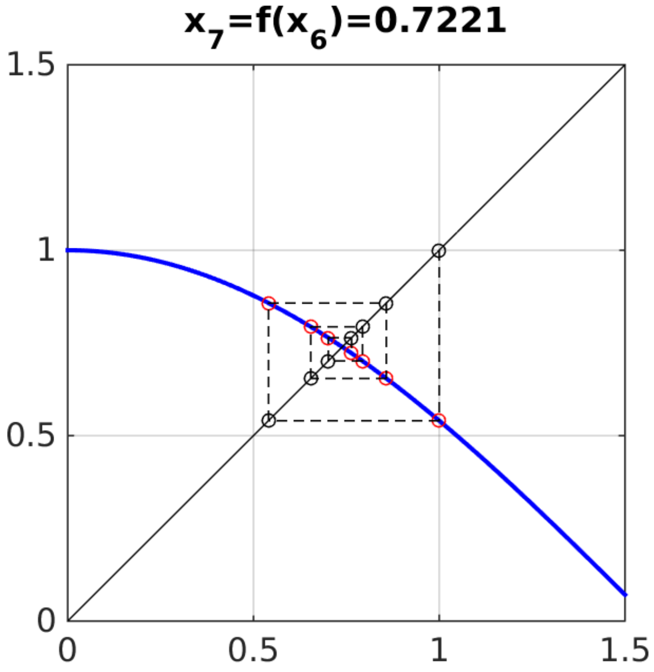
cos(1)=0.5403
cos(0.5403)=0.8576
cos(0.8576)=0.6543
cos(0.6543)=0.7935
cos(0.7935)=0.7014
cos(0.7014)=0.7640

Kva *er* numeriske metodar?

To eksempel:

$$x = \cos x$$

$$\int_{0.5}^{1.5} \sin x^2 \, dx$$



cos(1)=0.5403
cos(0.5403)=0.8576
cos(0.8576)=0.6543
cos(0.6543)=0.7935
cos(0.7935)=0.7014
cos(0.7014)=0.7640
cos(0.7640)=0.7221

Kva *er* numeriske metodar?

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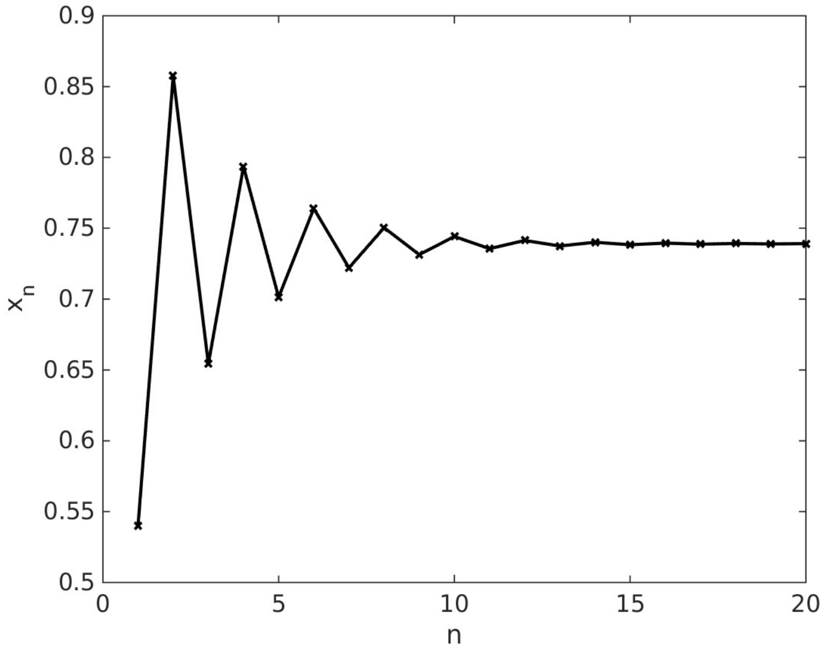

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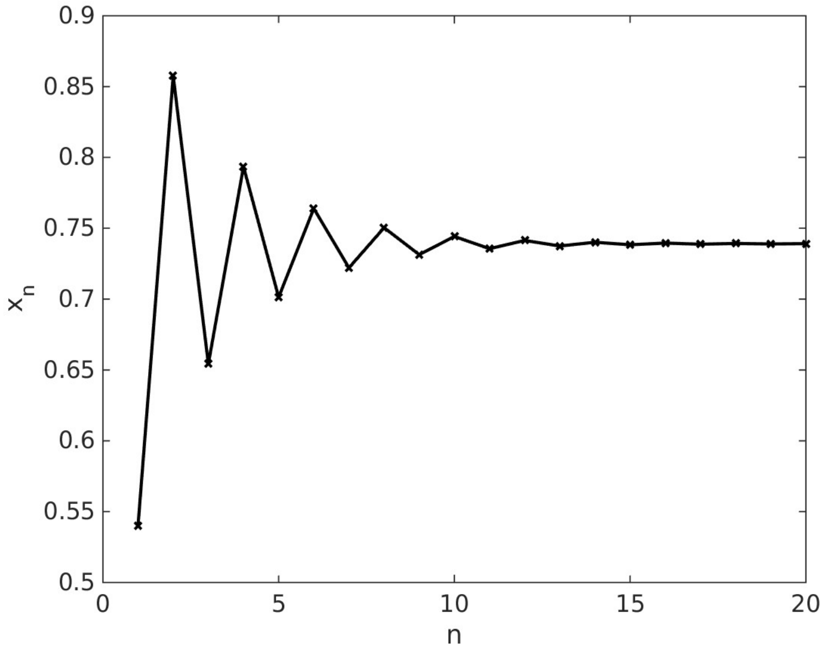

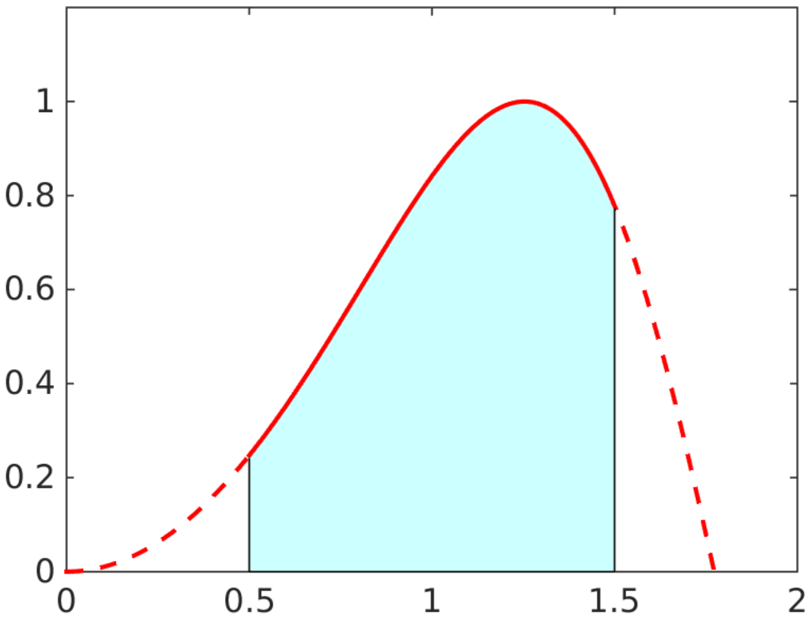

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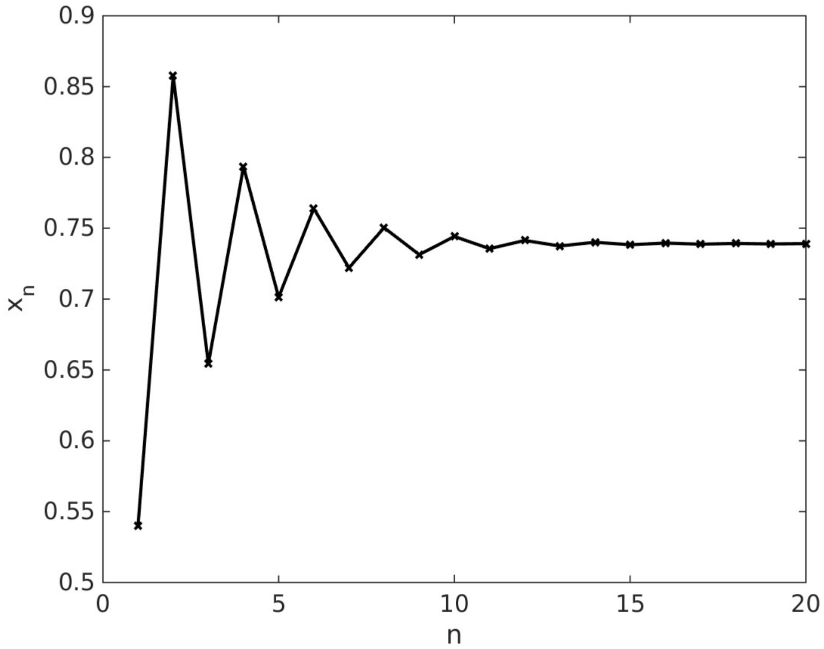

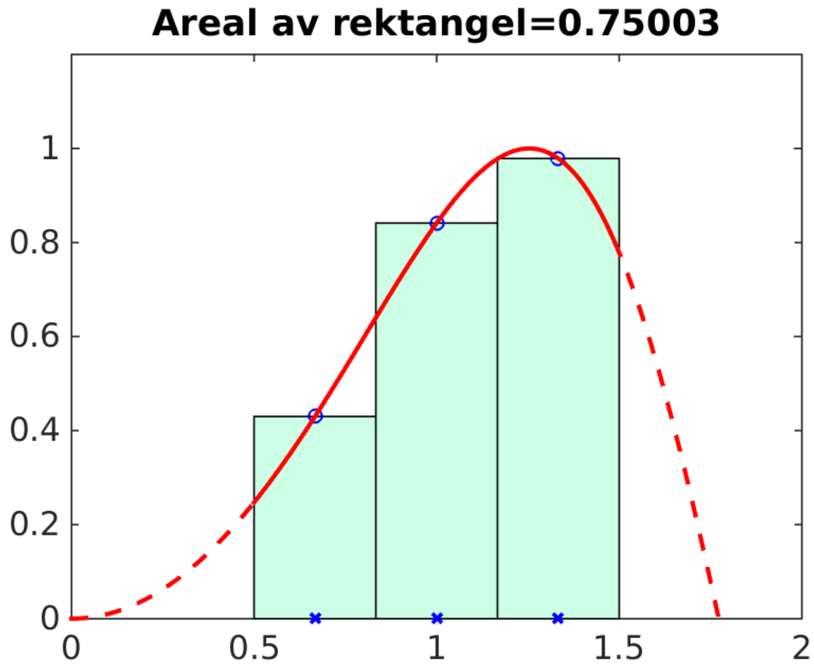

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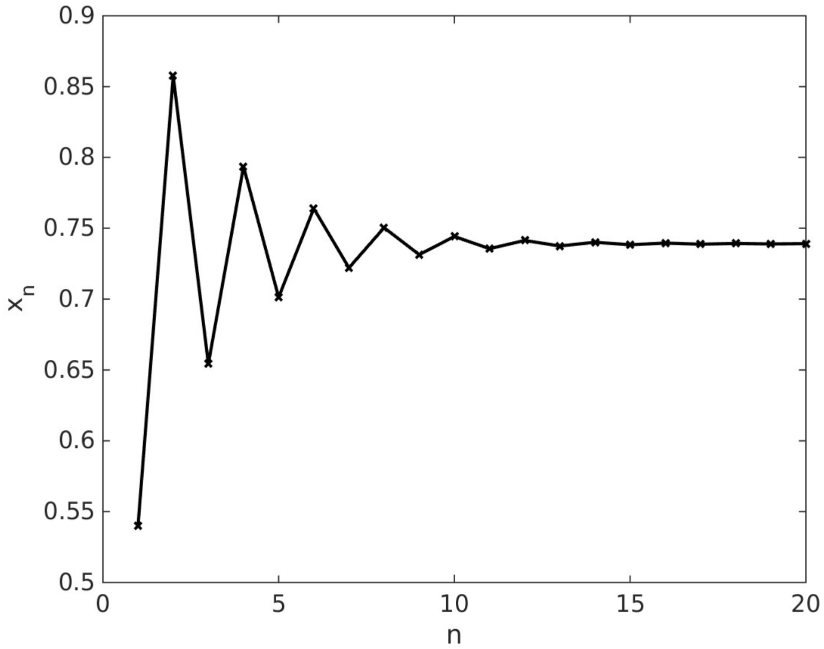

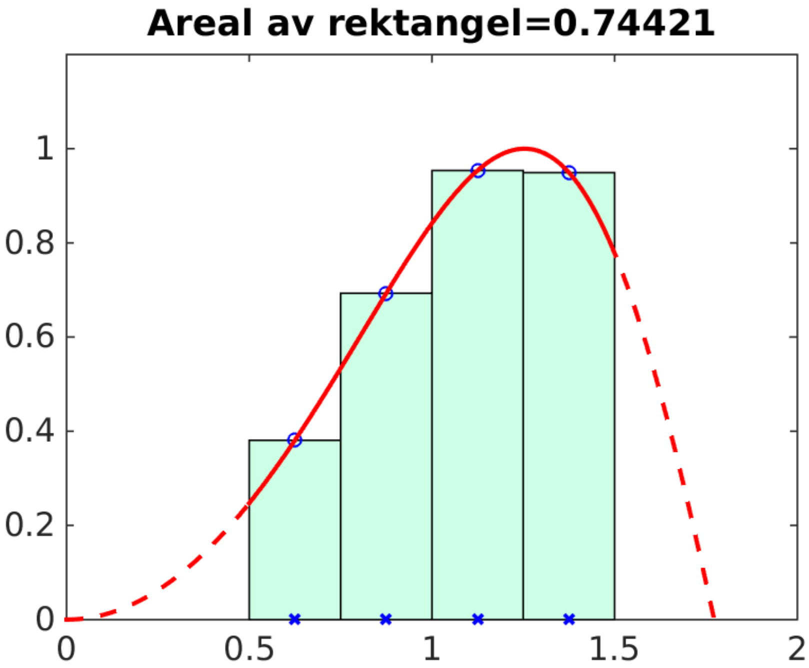

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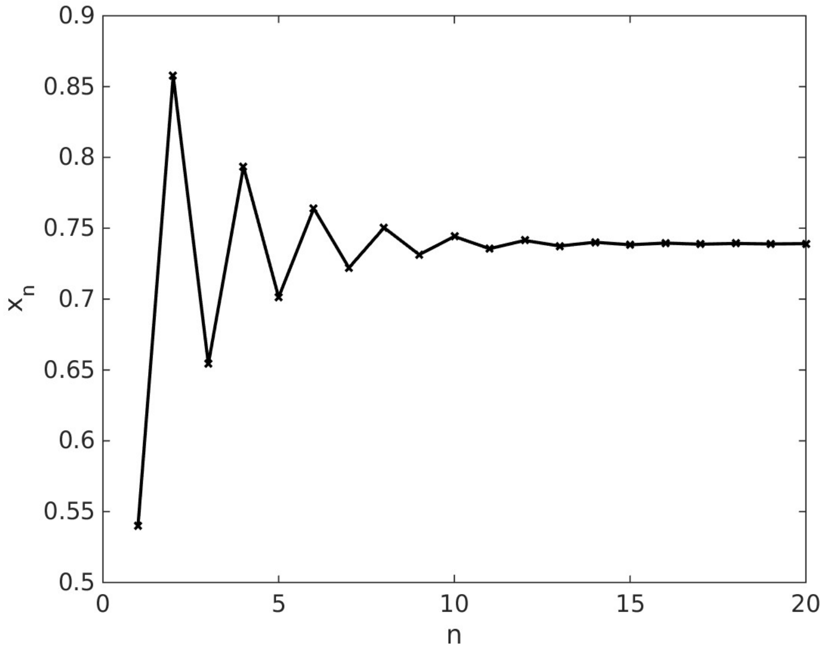

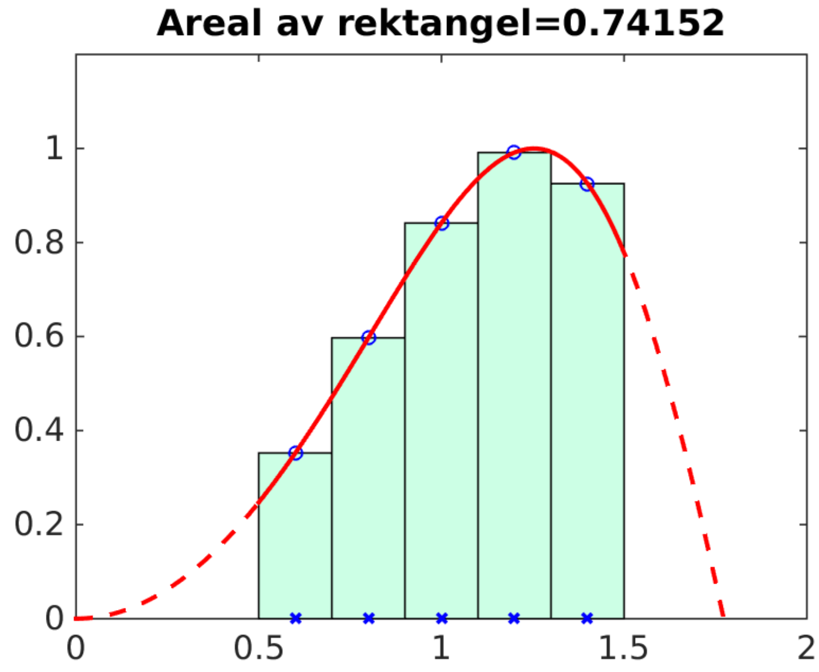

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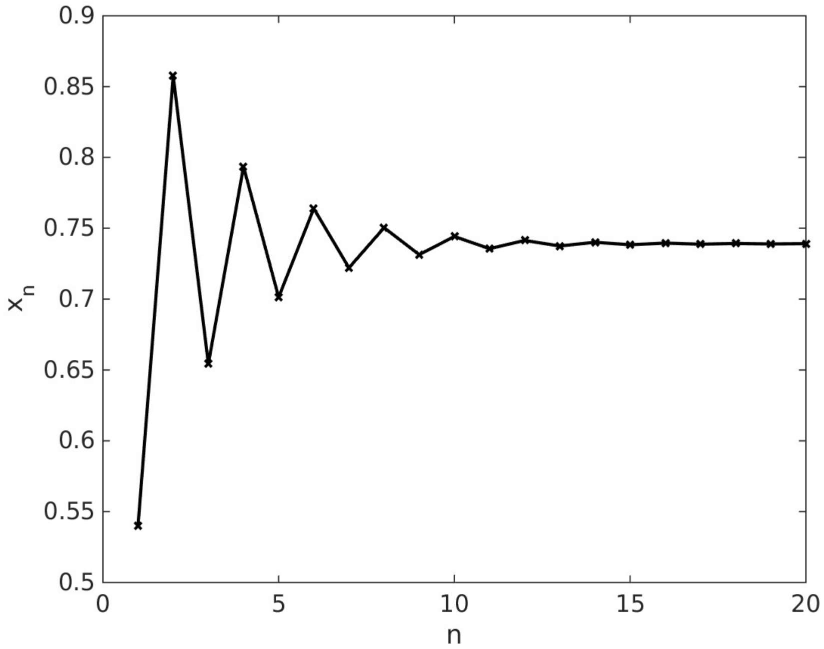

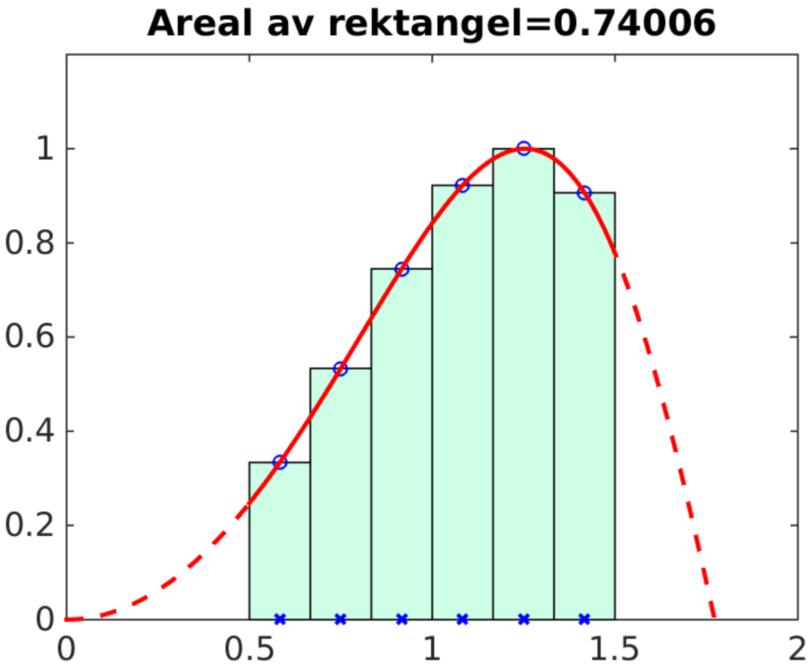

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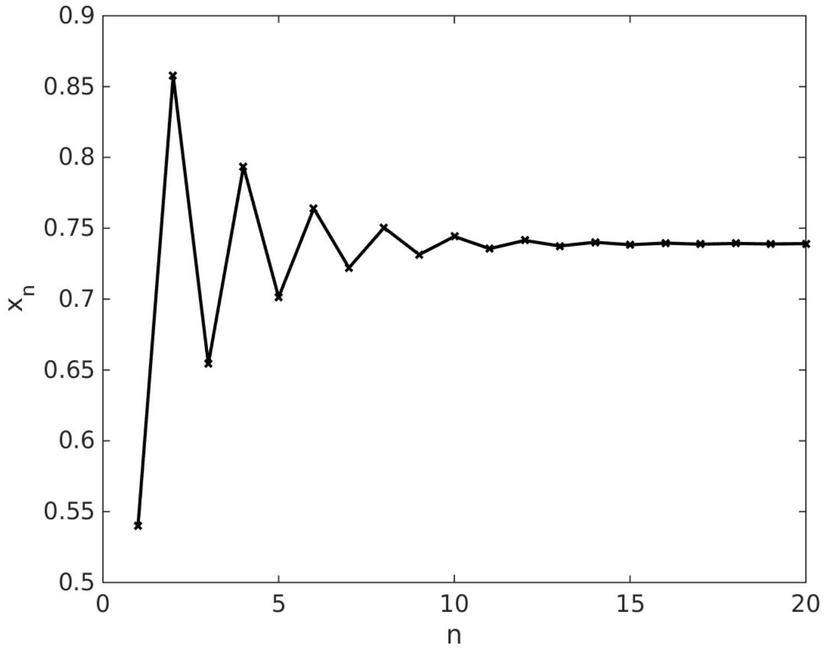

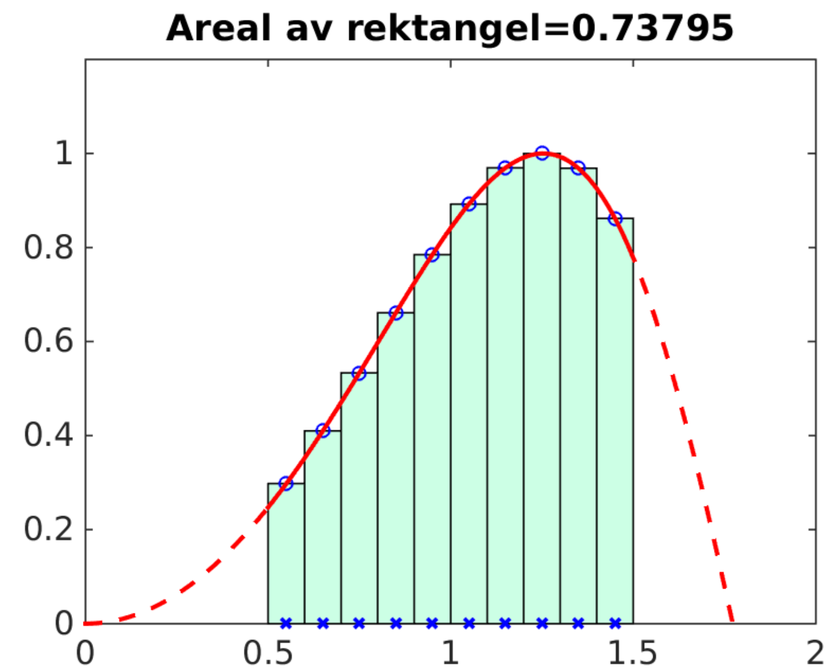

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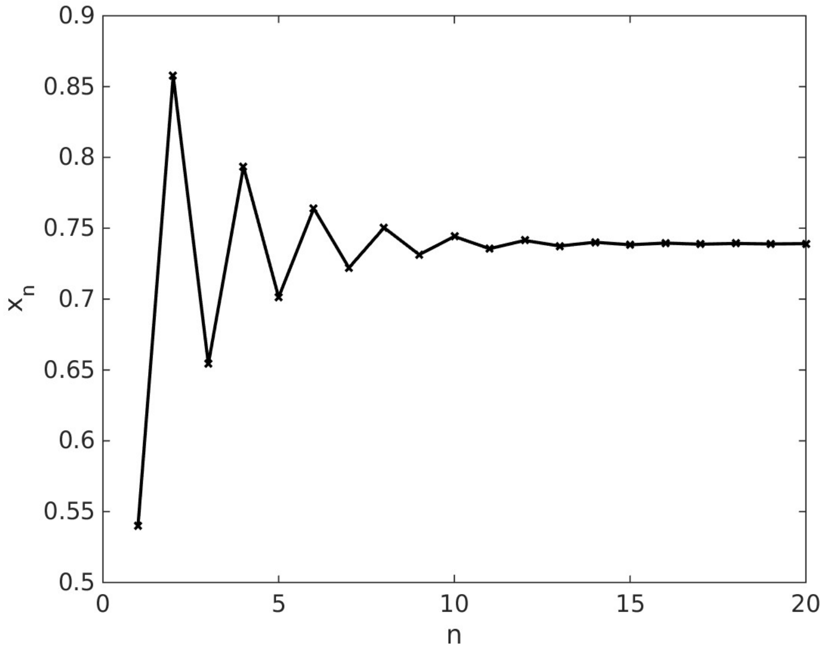

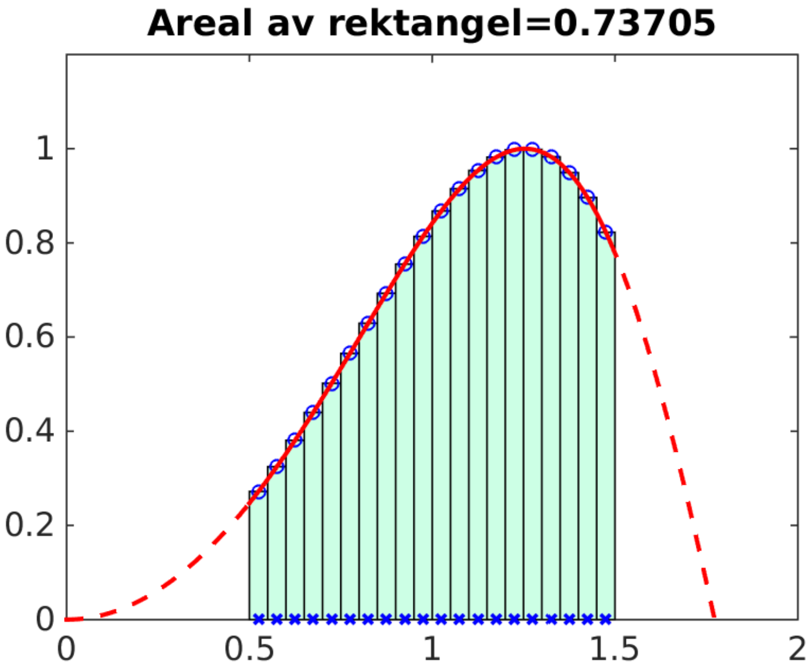

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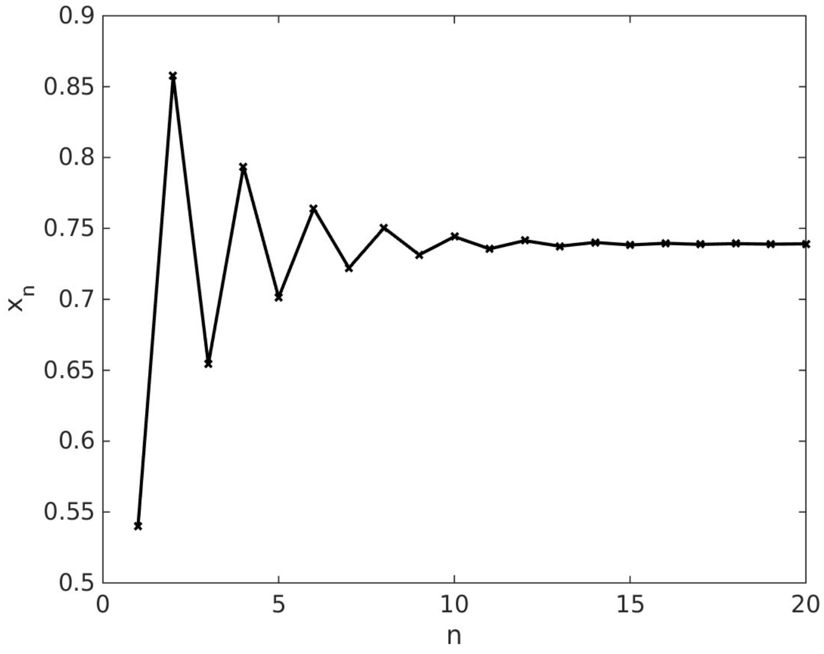

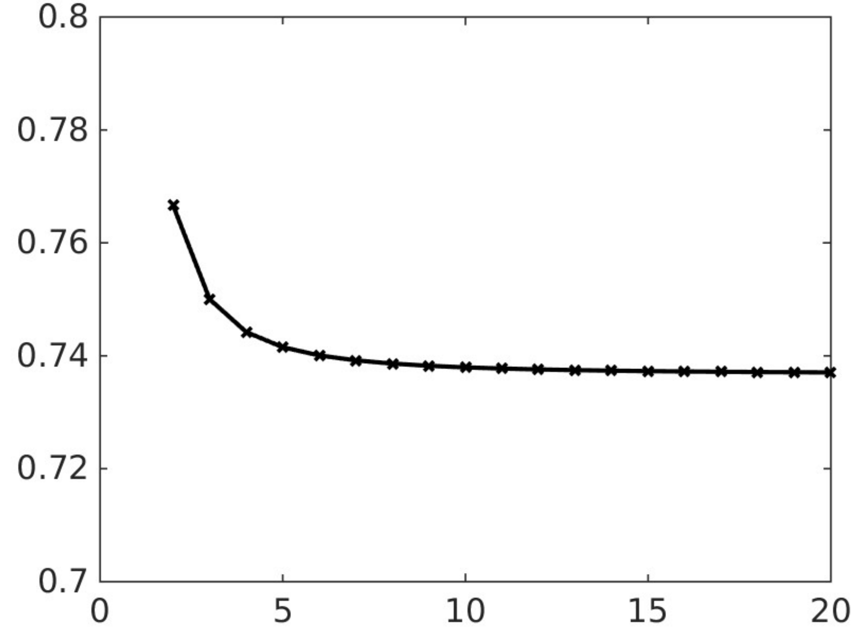

Verktøy

Verktøy

python

MATLAB
The Language of Technical Computing

Java

GNU Octave

C/C++

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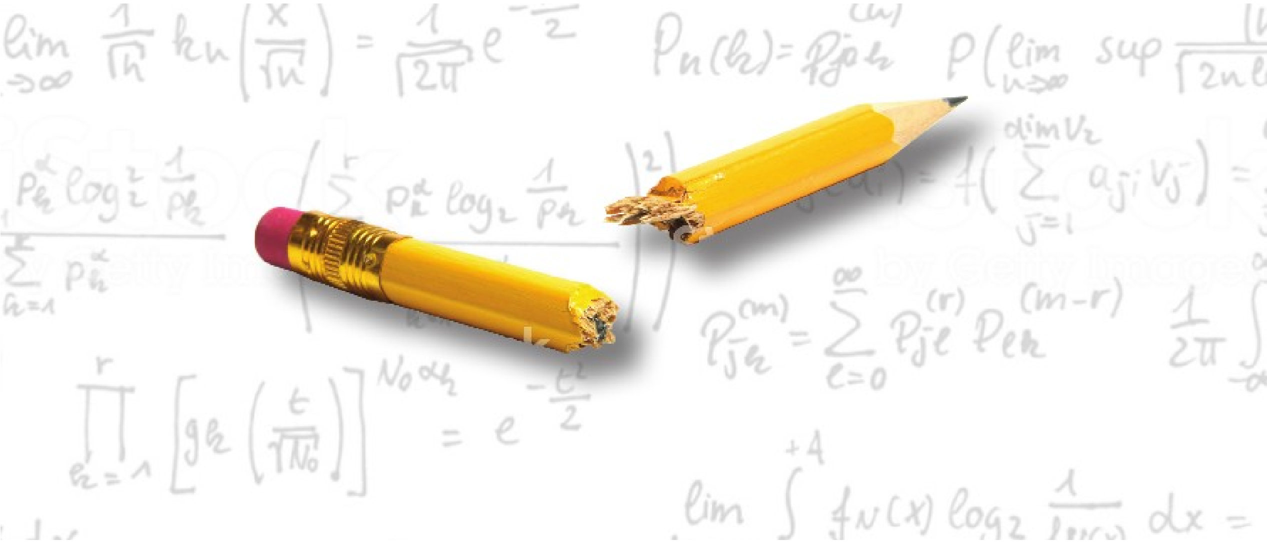
Kvifor skal vi lære slikt?

- Det er ofte (oftast?) slik kvantitative problem blir løyst i praksis;
  det er unntaket snarare enn regelen at ein kjem i mål med papir og blyant



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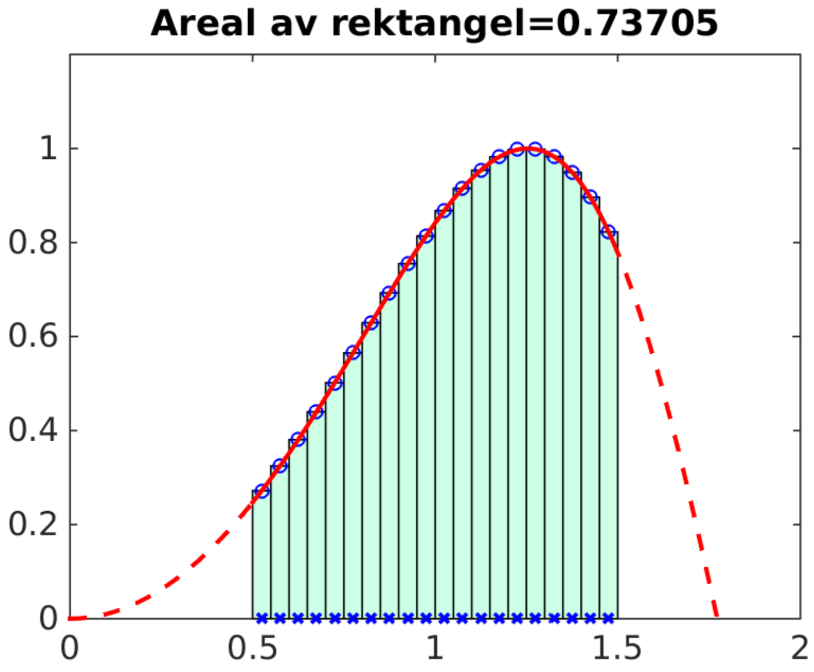
- Det er slik vi – i all hovudsak faktisk *brukar* matte

- Ved å implementere ei løysing på denne måten, *forstår* vi også kva vi held på med



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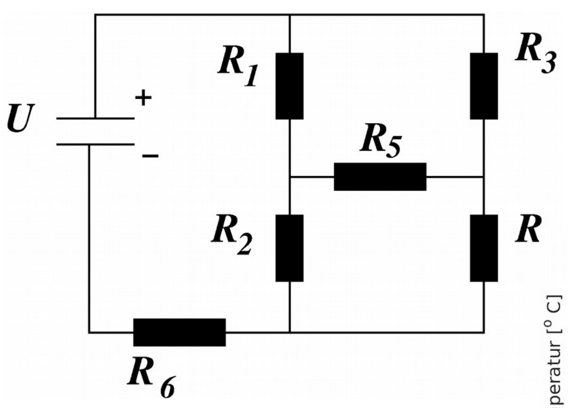

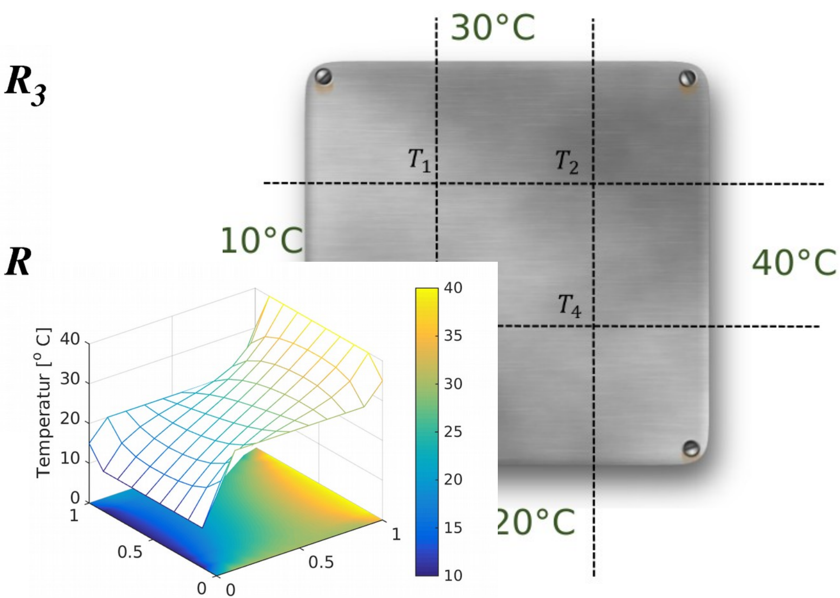

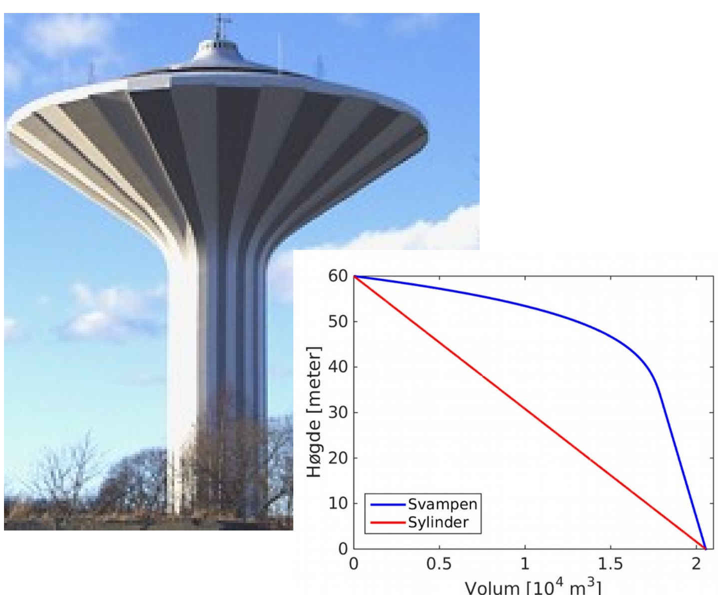

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- Numeriske metodar er ikkje idiotsikre; viktig å kunne bruke programvare på
  ein reflektert og kritisk måte


Stavanger Aftenblad

Sleipner til bunns

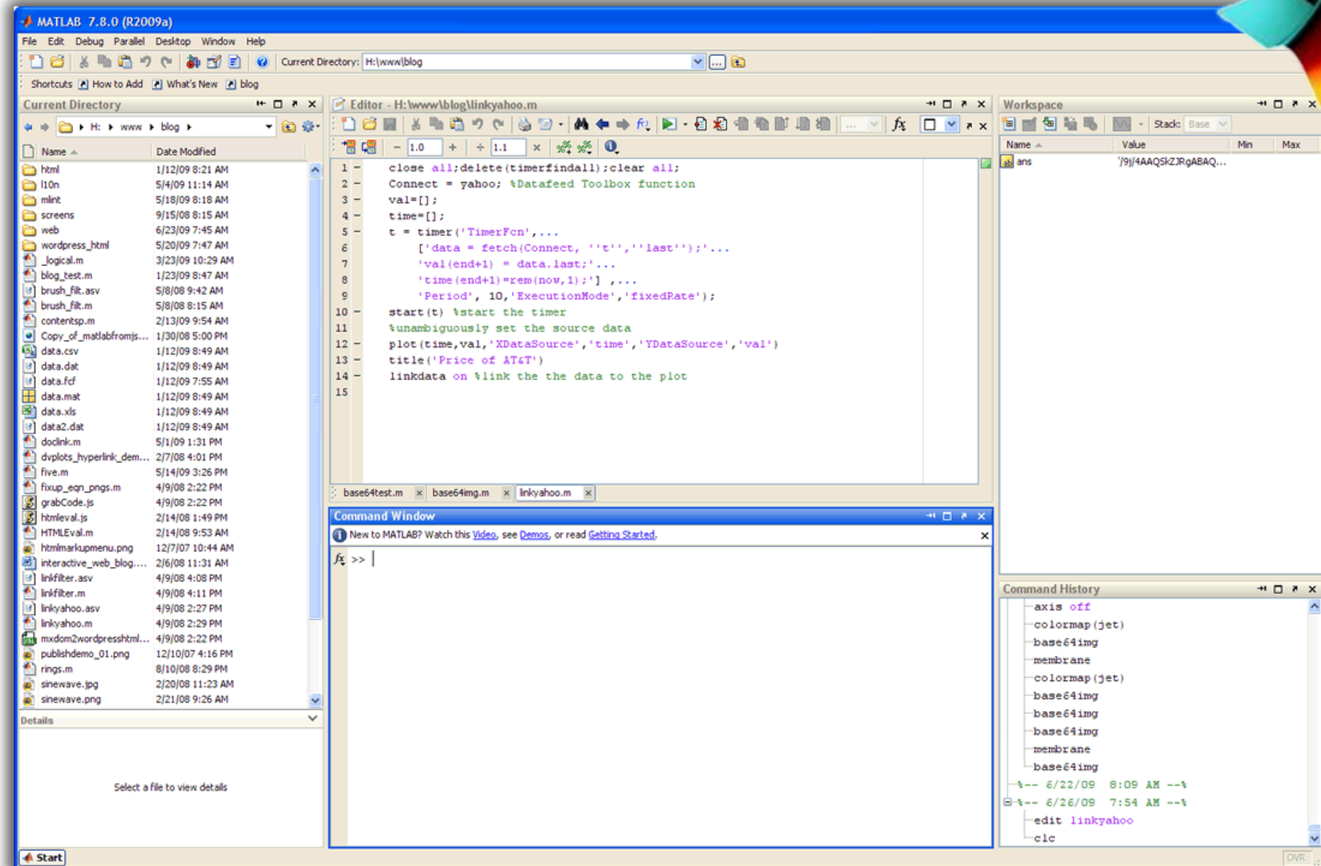
1 NYHETER

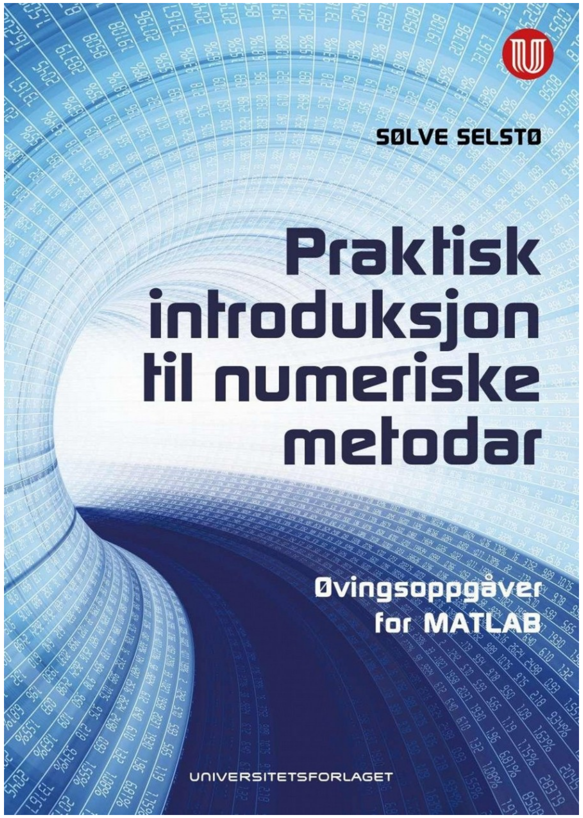
2 UTSYN

3 LOKAL

4 SPORT

MATLAB


MATLAB 7.8.0 (R2009a)
File Edit Debug Parallel Desktop Window Help
Current Directory
Editor - H:\www\blog\linkyahoo.m
Workspace
close all;delete(timerfindall);clear all;
Connect = yahoo; %Datafeed Toolbox function
val=[];
time=[];
t = timer('TimerFcn',...
['data = fetch(Connect, ''t'',''last'');'...
'val(end+1) = data.last;'...
'time(end+1)=rem(now,1);'] ,...
'Period', 10,'ExecutionMode','fixedRate');
start(t) %start the timer
%unambiguously set the source data
plot(time,val,'XDataSource','time','YDataSource','val')
title('Price of AT&T')
linkdata on %link the the data to the plot
Command Window
Command History
Start


SØLVE SELSTØ
Praktisk introduksjon til numeriske metodar
Øvingsoppgåver for MATLAB
UNIVERSITETSFORLAGET