1

```
0.1 4.713433540570504
0.01 4.5041723976187775
0.001 4.483930662008362
0.0001 4.481913162264206
1e-05 4.4817114789097445
1.0000000000000002e-06 4.481691311397639
1.0000000000000002e-07 4.48168930411441
1.0000000000000002e-08 4.481689064306237
1.0000000000000003e-09 4.481689686031131
1.0000000000000003e-10 4.481695015101649
1.0000000000000003e-11 4.481748305806831
1.0000000000000002e-12 4.482636484226531
1.0000000000000002e-13 4.4853010194856315
1.0000000000000002e-14 4.529709940470638
1e-15 5.329070518200751
1.0000000000000001e-16 0.0
1e-17 0.0
```

Det er mest presist når $h = 10^{-13}$ og fra $h = 10^{-16}$ blir den beregnede verdien 0.

2

```
0.1 4.489162287752202
0.01 4.481763765529401
0.001 4.481689817286139
0.0001 4.48168907780655
1e-05 4.481689070434669
1.0000000000000002e-06 4.481689070079397
1.0000000000000002e-07 4.481689073188021
1.0000000000000002e-08 4.481689019897316
1.0000000000000003e-09 4.481689241941921
1.0000000000000003e-10 4.4816905742095505
1.0000000000000003e-11 4.481703896885846
1.0000000000000002e-12 4.482192395016681
1.0000000000000002e-13 4.480860127387131
1.0000000000000002e-14 4.4853010194856315
1e-15 4.884981308350689
1.0000000000000001e-16 0.0
1e-17 0.0
```

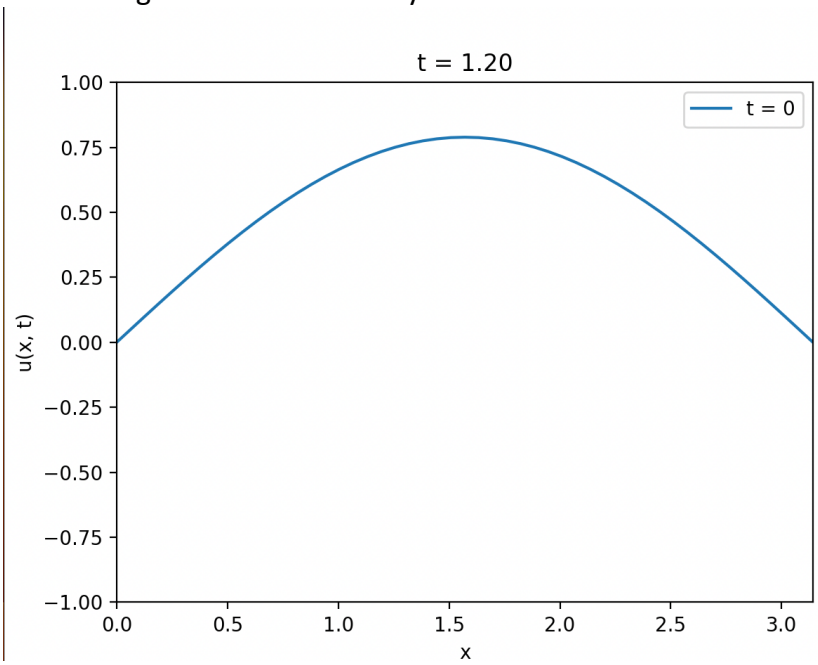
Nå er den mest presis med h = 10^{-11}, og etter h=10^{-16} er den 0.

3

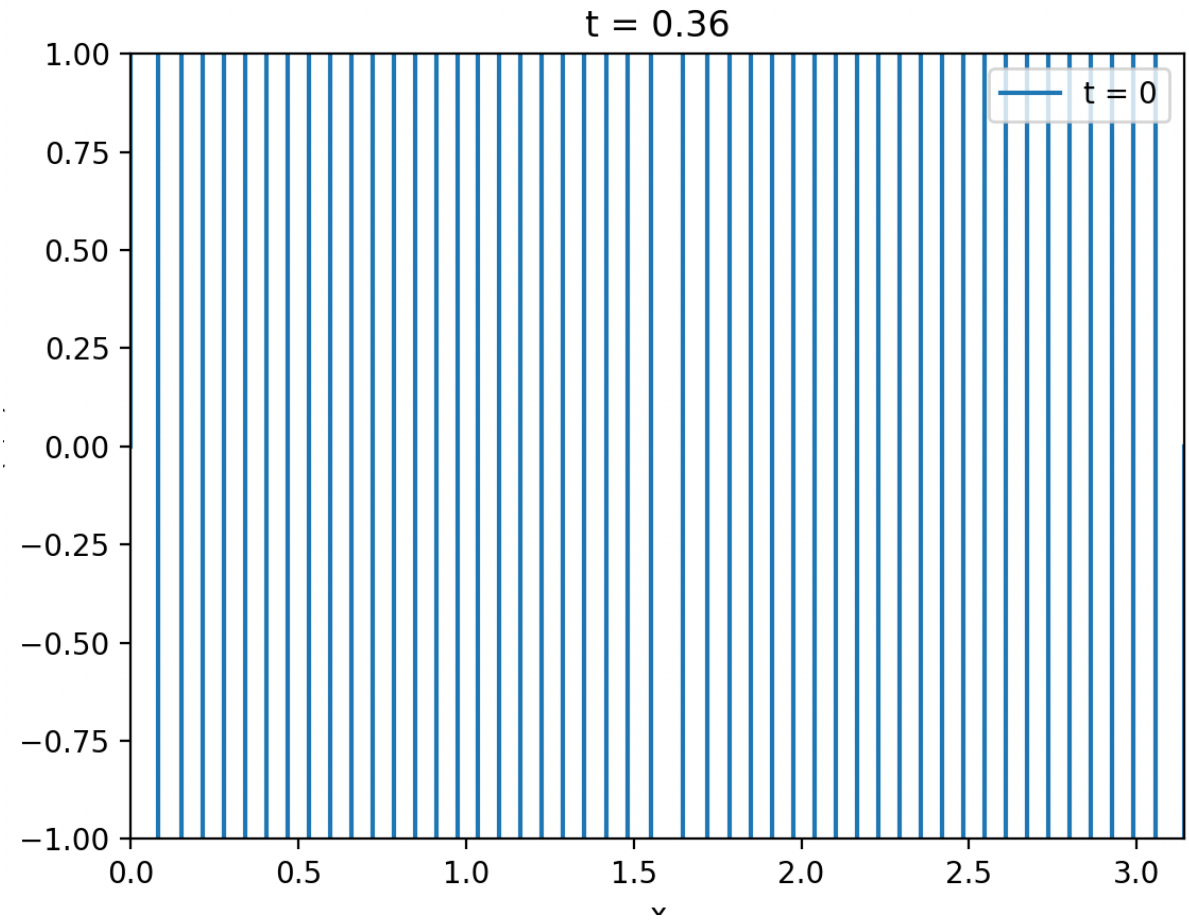
Jeg vil ikke slå på stortrommen.

4

Koden fungerer best når k er mye mindre enn h. Når de er like ser det ut som mange streker.



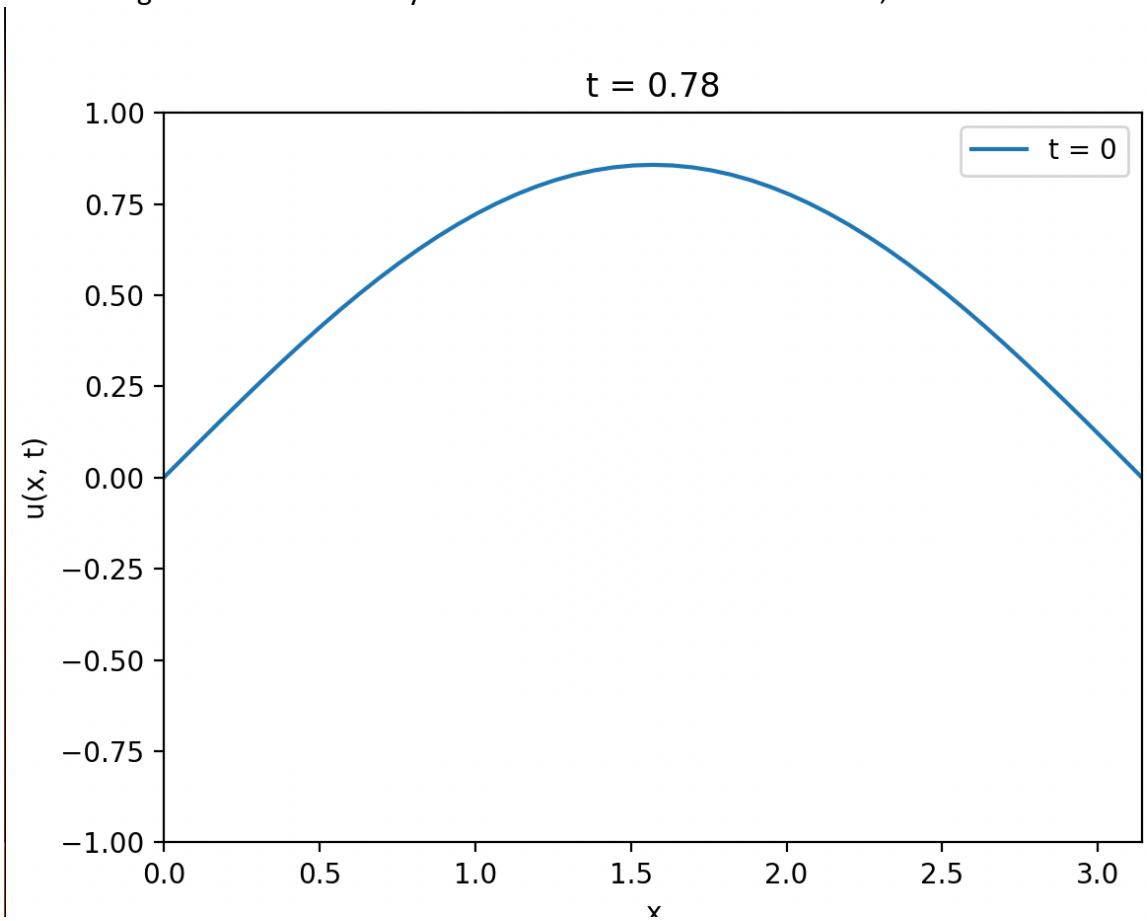
k=0.001, h=0.1



h=k=0.1

5

Koden fungerer best når k er mye mindre enn h. Når de er like store, er det bare en flat linje.



h=0.1, k=0.001

6

Se programmet.