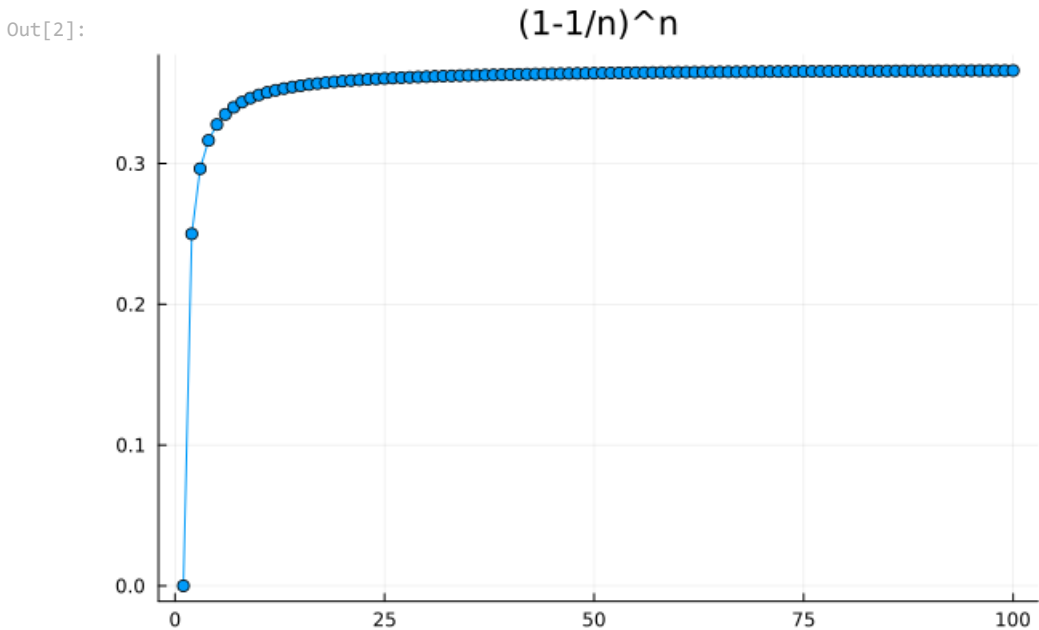


```
In [1]: using Plots
        default( leg = :false )
```

## 教科書 p.9 問題の一部へのヒント

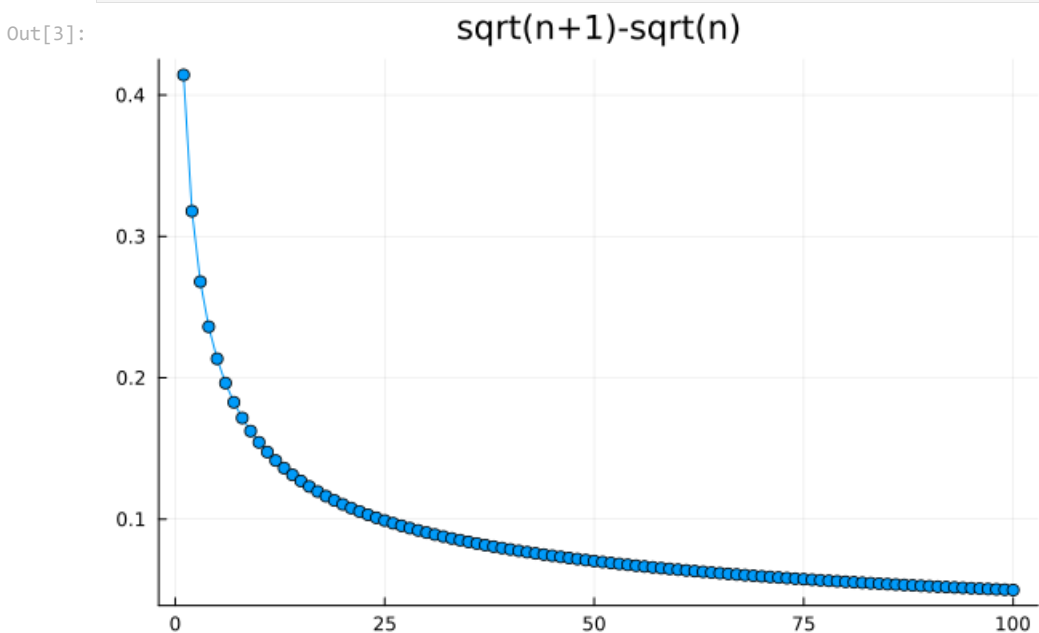
### for 問 1 (1)

```
In [2]: v = [ (1.0 - 1/n)^n for n in 1:100 ]
        plot(1:100, v, marker = :circ, title = "(1-1/n)^n")
```



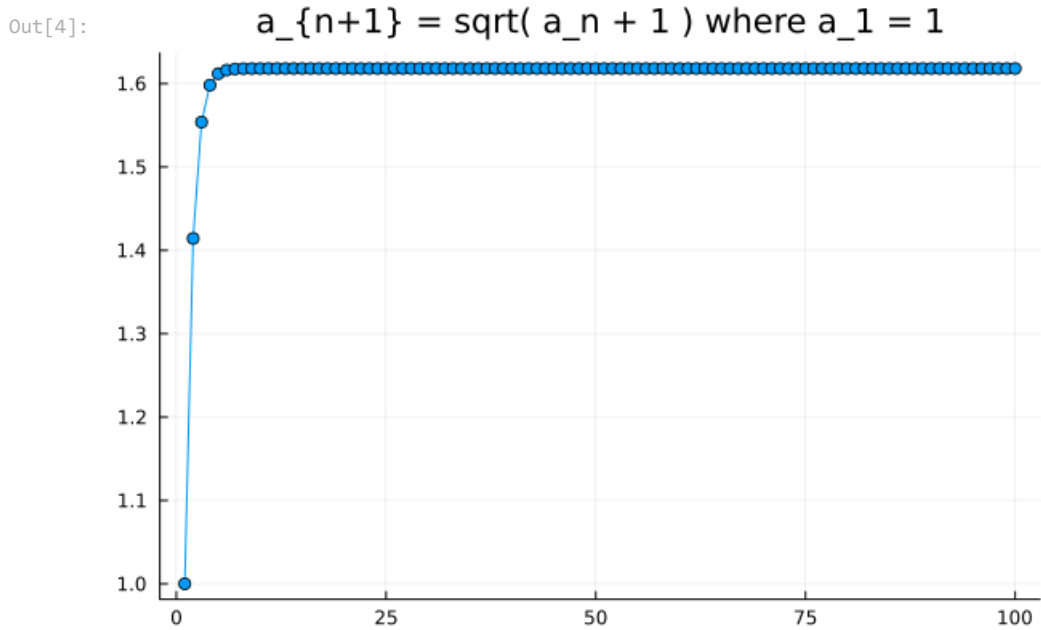
### for 問 1 (2)

```
In [3]: v = [ sqrt(n+1) - sqrt(n) for n in 1:100 ]
        plot(1:100, v, marker = :circ, title = "sqrt(n+1)-sqrt(n) ")
```



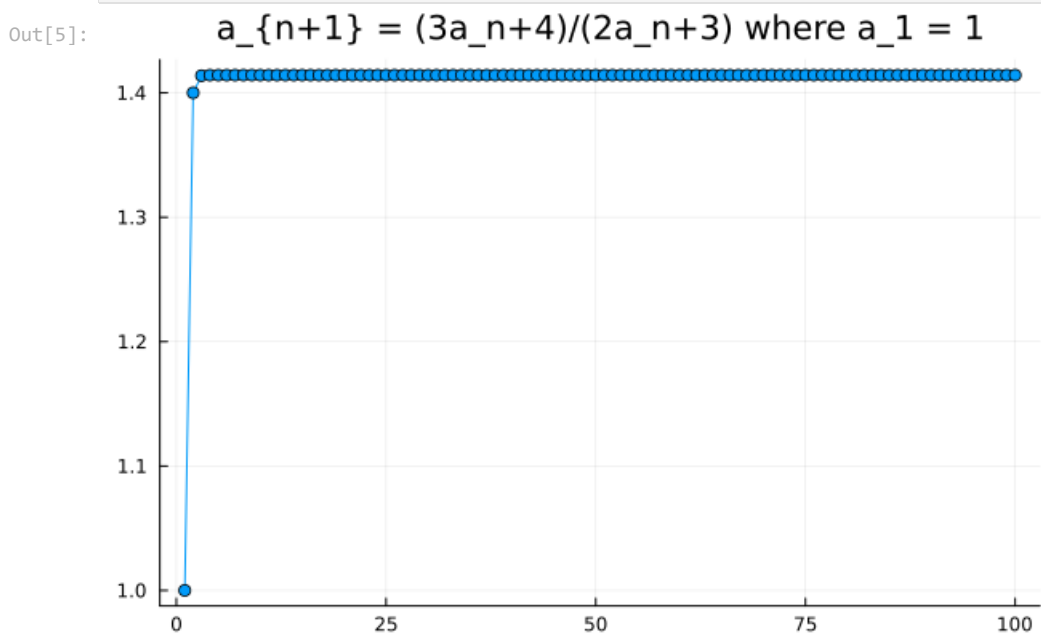
### for 問 2 (1)

```
In [4]: v = [ 1.0 ]
for i in 1:99
    a_n = v[end]
    a = sqrt( a_n + 1 )
    push!(v, a)
end
plot(1:100, v, marker = :circ, title = "a_{n+1} = sqrt( a_n + 1 ) where a_1 = 1" )
```



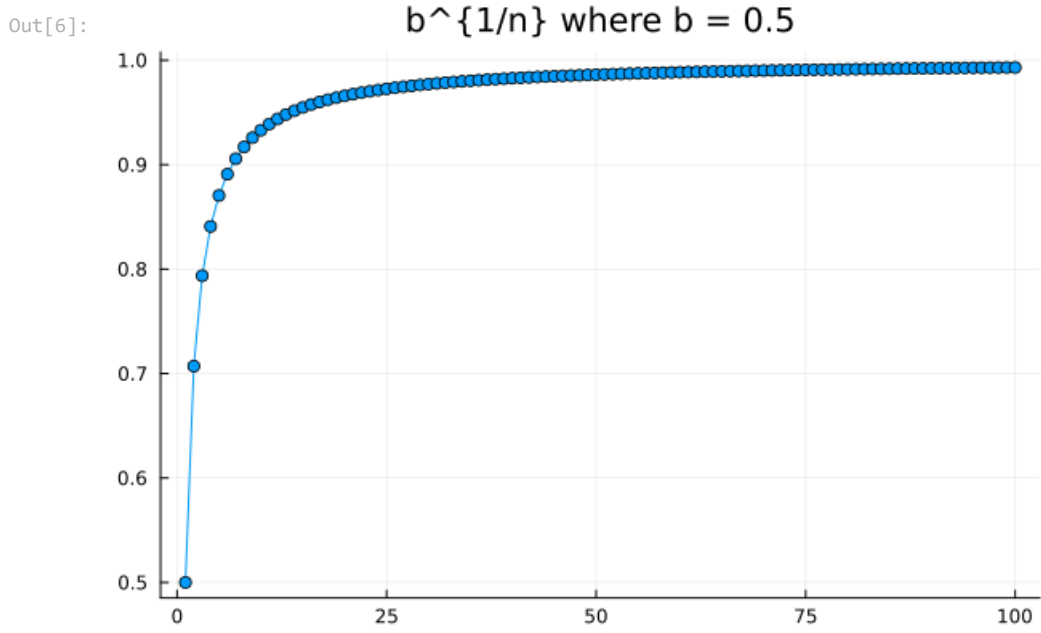
for 問 2 (2)

```
In [5]: v = [ 1.0 ]
for i in 1:99
    a_n = v[end]
    a = (3a_n + 4)/(2a_n + 3)
    push!(v, a)
end
plot(1:100, v, marker = :circ, title = "a_{n+1} = (3a_n+4)/(2a_n+3) where a_1 = 1" )
```

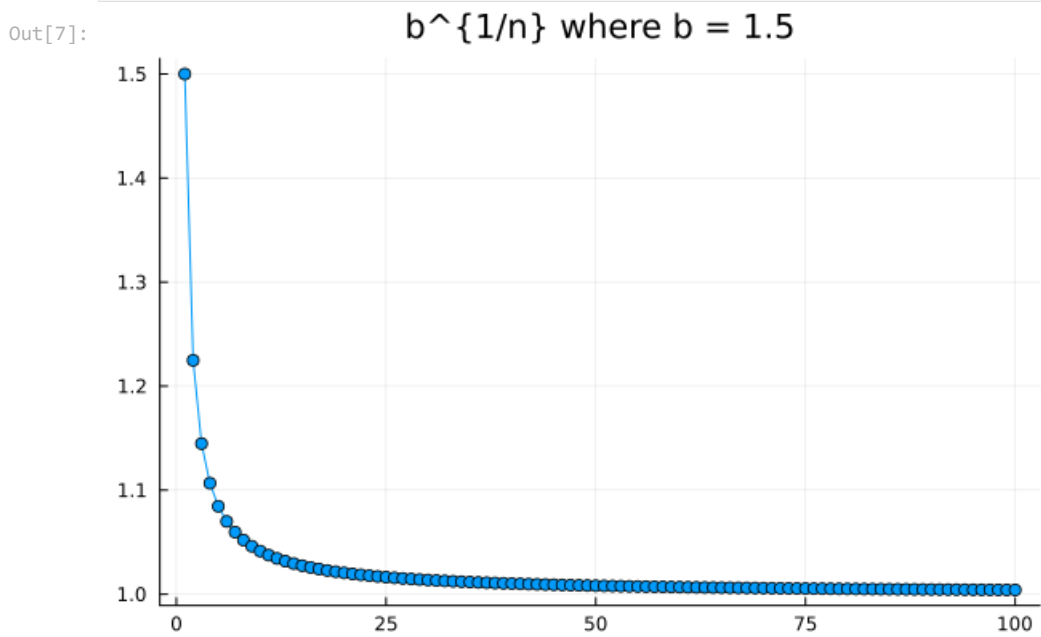


for 問 3

```
In [6]: b = 0.5
v = [ b^(1/n) for n in 1:100 ]
plot(1:100, v, marker = :circ, title = "b^{1/n} where b = 0.5" )
```



```
In [7]: b = 1.5
v = [ b^(1/n) for n in 1:100 ]
plot(1:100, v, marker = :circ, title = "b^{1/n} where b = 1.5" )
```



In [ ]: