

```
In [1]: using Plots
```

問 1 (2)

```
In [3]: asin( - sqrt(3)/2 )
```

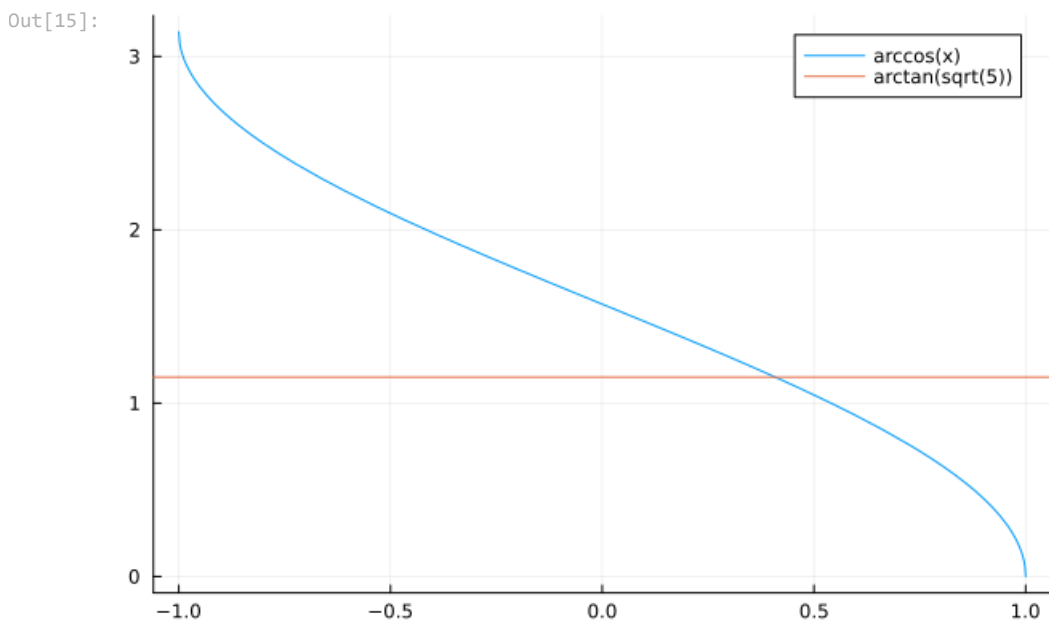
```
Out[3]: -1.0471975511965976
```

```
In [5]: - pi/3
```

```
Out[5]: -1.0471975511965976
```

問 2 (1)

```
In [15]: f(x) = acos(x)
plot(f, label = "arccos(x)")
hline!( [atan(sqrt(5))], label = "arctan(sqrt(5))")
```



```
In [14]: a = 1/sqrt(6)
a, f(a), atan(sqrt(5))
```

```
Out[14]: (0.4082482904638631, 1.1502619915109316, 1.1502619915109316)
```

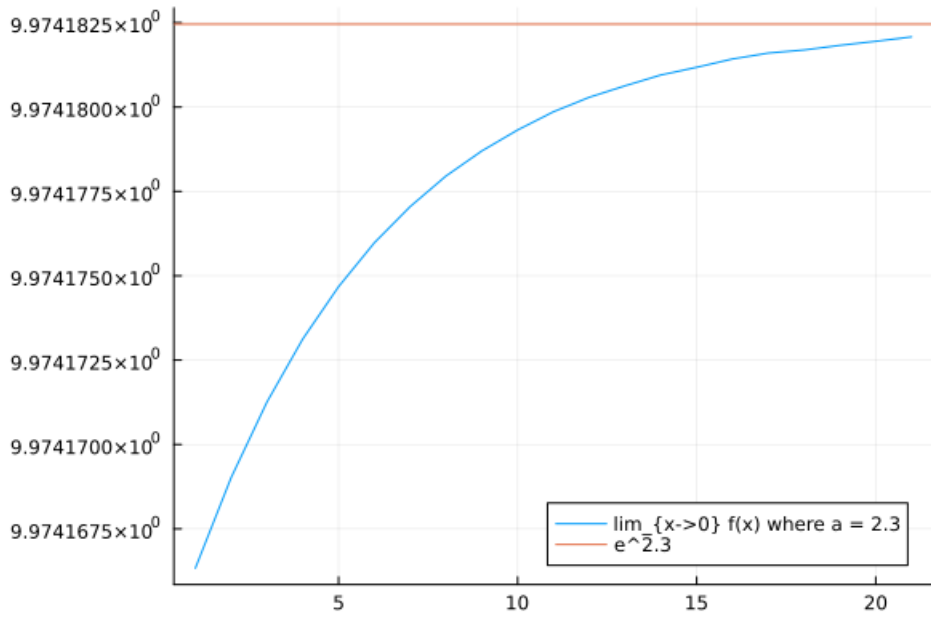
問 3 (1)

```
In [46]: f(x) = (1+a*x)^(1/x)

a = 2.3
v = Float64[]
x = 1.1
for n in 1:100
    push!(v, f(x))
    x = x/1.2
end

plot(v[end-20:end], label = "lim_{x->0} f(x) where a = 2.3")
hline!( [exp(1.0)^2.3], label = "e^2.3" )
```

Out[46]:



In []: