

## ■ Data

```
data = {0.3, 0.5, 0.7, 0.8, 0.9}  
{0.3, 0.5, 0.7, 0.8, 0.9}
```

## ■ $P(D|H_0)$

```
 $\left(\frac{1}{2}\right)^5$   
 $\frac{1}{32}$  // N  
0.03125
```

## ■ $P(D|H_1)$

```
L =  $\frac{1}{2}$  (1 - 0.4 x) /. x -> {0.3, 0.5, 0.7, 0.8, 0.9}  
{0.44, 0.4, 0.36, 0.34, 0.32}  
Product[L[[i]], {i, 1, 5}]  
0.00689357
```

## ■ The ratio

```
0.03125` / 0.006893567999999998`  
4.53321
```

The  $H_0$  seems 4.5 times better than  $H_1$