

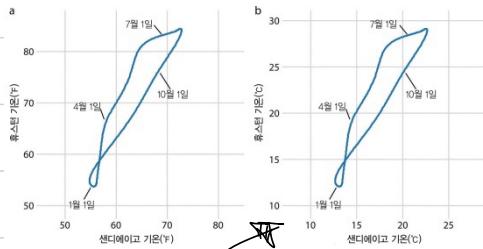
### Chapter 3 Position scale (Coordinate & axes)

Control 'Aspect ratio' → If there are something to emphasize.

If there 'Same units' in x, y axes.

interval should be same (Square shape)

Ex)



→ If units are changed, graph will be same.  
(Linear transformation)

fixed interval Ex)

But sometime 'Non linear' is more useful.

The most common 'Non-Linear'  $\Rightarrow$  Logarithmic Scale / Log Scale.



Like this, the value obtained by multiplication and division is good form to be expressed by log scale.



squared root scale → good for squared value data such as  
size of area.

Log Scale → good for ratio type data.

Example)

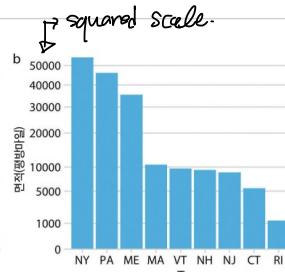
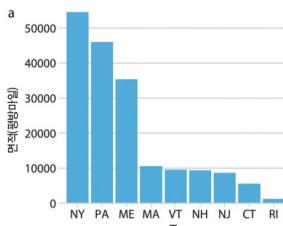


그림 3-8 미국 북동부 주들의 면적. (a) 면적을 선형 스케일에 표시했다. (b) 면적을 제곱근 스케일에 표시했다. (자료 출처: 구글)