Answer on Question #63349-Physics-Other

$$I = kV^n$$

What does n and k represent?

Why do we log it in the first place (what does the log version help to do)?

Answer

Logging it gives you

$$logI = log(kv^n)$$

$$logI = logk + logv^n$$

$$logI = logk + n\,logv$$

Compare that with $y = mx + c$ (equation for a straight line)

$$Y = log\ I$$

$$m = n$$

$$x = log\ v$$

$$c = log\ k$$

So, plotting $logI$ on Y axis and $log\ v$ on X axis would give you a straight line with y intercept $log\ k$ and gradient n.