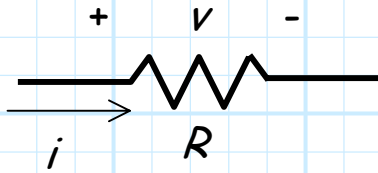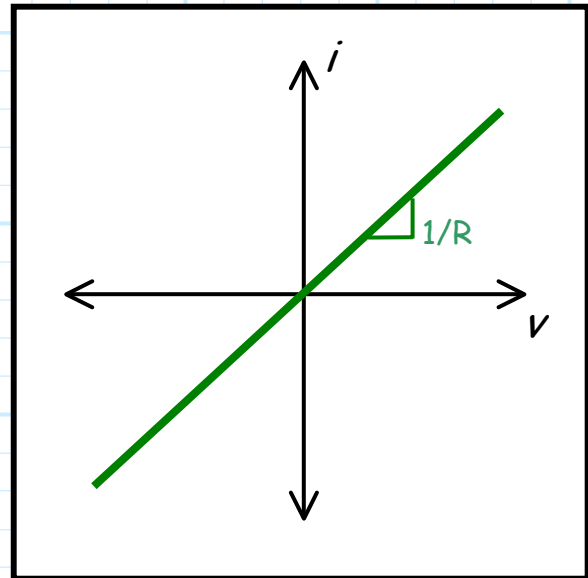# Linear Device Behavior
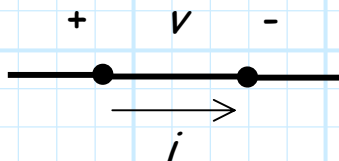
1) Recall the circuit behavior of a **resistor**:

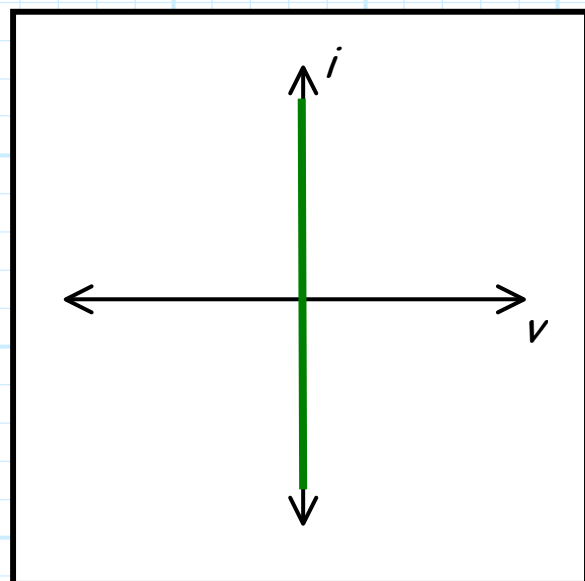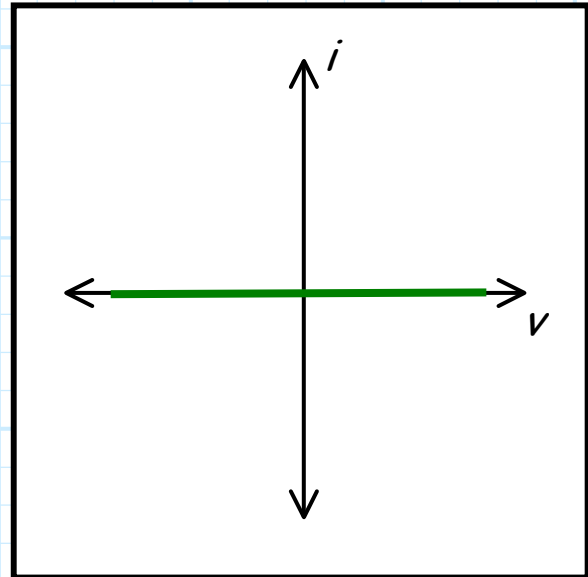$$i = \frac{v}{R}$$

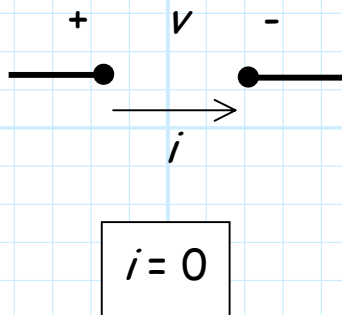2) If R=0, then we have a **short** circuit:

$$v = 0$$

3) If R=∞ , then we have a **open** circuit:

+   v   -

$i = 0$

4) We can also plot the behavior of both current and voltage **sources**:

$v = 2V$

$i = 1\,A$