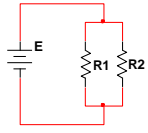


## DC Current Divider Rule (48:02)

Draw the diagram and the formula necessary to utilize the CDR. (10:20)

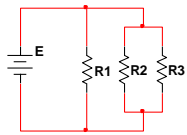


Given the above circuit and  $I_s = 42\text{mA}$ ,  $R_1 = 200\ \Omega$ , and  $R_2 = 600\ \Omega$ , use the CDR to solve for  $I_1$  and  $I_2$

Describe the principal advantage of the CDR.

Write the formula for an alternate configuration of the CDR. (22:09)

Describe the scenarios in which the CDR is the preferred circuit analysis technique.



Given the above circuit and  $I_s = 180\text{mA}$ ,  $R_1 = 510\ \Omega$ ,  $R_2 = 240\ \Omega$ , and  $R_3 = 130\ \Omega$ , use the CDR to solve for  $E$ ,  $V_1$ ,  $V_2$ ,  $V_3$ ,  $I_1$ ,  $I_2$  and  $I_3$

Comment on the utility of basic series properties, basic parallel properties, Ohm's Law, KVL and KCL as applied to series-parallel circuits.

Comment on variable voltage sources used to provide constant current to variable loads.

Comment on pairing the CDR with KCL for efficiency.