4. When $V_1 = 10V$, $I = 1A$, and the voltage drops across $R_1$ and $R_2$ are 2V and 3V, respectively. Find $R_3$ and the power dissipated in $R_3$.

![Diagram of a circuit with resistors R1, R2, and R3 connected in series with a voltage source $V_1$.]

$V_1 = 10V$
$VR_1 = 2V$
$VR_2 = 3V$

$\Rightarrow VR_3 = 5V$

Ohm's Law: $V = IR$
$E = 1 \cdot R$
$R = 5 \Omega = R_3$ (3 pts)

Watt's Law: $P = IV = 1A \cdot 5V = 5\text{Watts}$ (1 pt)