91. With the unit Ω understood, the equivalent resistance for this circuit is

$$R_{\text{eq}} = \frac{20R + 100}{R + 10} \ .$$

Therefore, the power supplied by the battery (equal to the power dissipated in the resistors) is

$$P = \frac{V^2}{R} = V^2 \frac{R + 10}{20R + 100}$$

where $V = 12$ V. We attempt to extremize the expression by working through the $dP/dR = 0$ condition and do not find a value of R that satisfies it. We note, then, that the function is a monotonically decreasing function of R, with $R = 0$ giving the maximum possible value (since $R < 0$ values are not being allowed). With the value $R = 0$, we obtain $P = 14.4$ W.