(3pts) Problem 6

A typical house wiring circuit can safely pass 15 amps before the circuit breaker trips. How many 100 W bulbs can be illuminated on such a circuit?

$V = 120\ V$
$I = 15A$

$P = (120V)(15A) = 1800\ W$

Each bulb is 100W $\Rightarrow \frac{1800\ W}{100\ W} =$ **18 Bulbs**