2.2.8.1

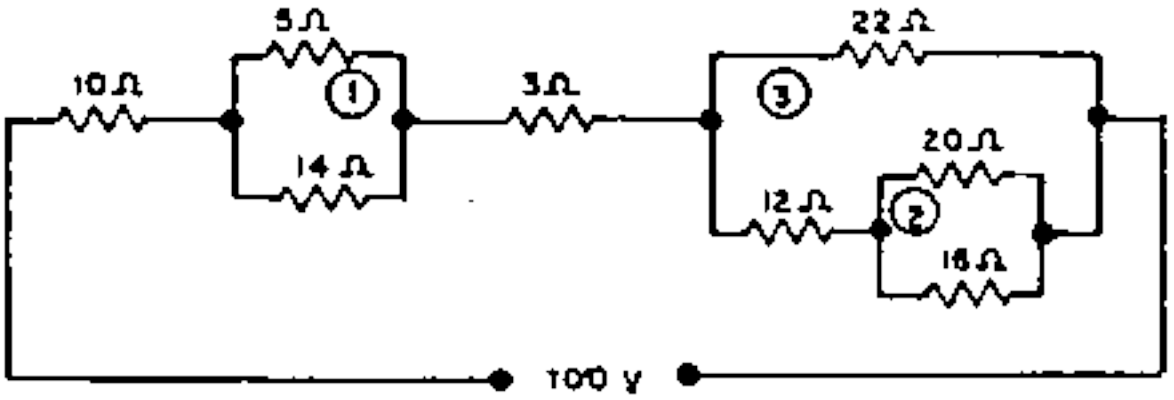
A corrente que atravessa o circuito indicado é de:

a) 4,72 mA ..... ☐

b) 47,2 mA ..... ☐

c) 3,65 A ..... ☒

d) 6 A ..... ☐

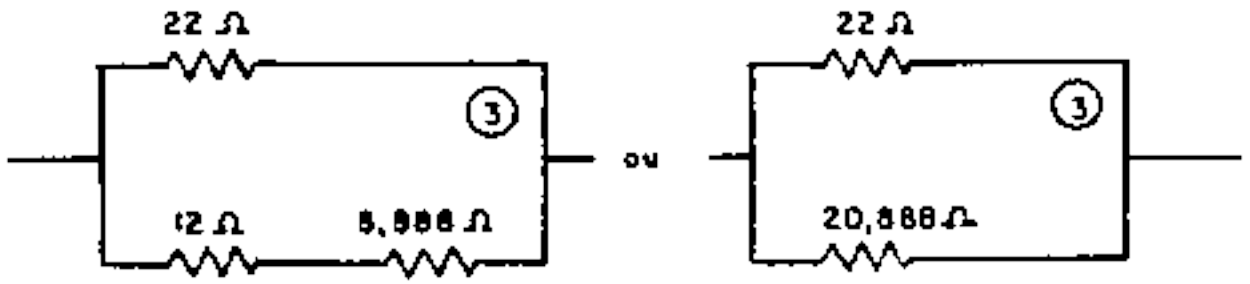


Nota: O cálculo da resistência equivalente dá: 27,4 Ω

$10 + 3{,}684 + 3 + 10{,}715 \cong 27{,}4\ \Omega$

Cálculo do paralelo ①: $R_{p1} = \frac{5 \times 14}{5 + 14} = 3{,}684\ \Omega$

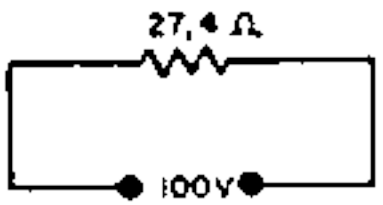
" " " ②: $R_{p2} = \frac{20 \times 16}{20 + 16} \cong 8{,}888\ \Omega$



$12 + 8{,}888 = 20{,}888\ \Omega$

Cálculo do paralelo ③: $R_{p3} = \frac{22 \times 20{,}888}{22 + 20{,}888} = 10{,}715\ \Omega$

Aplicando a lei de Ohm:



$V = RI \Rightarrow I = \frac{V}{R} = \frac{100}{27{,}4} = 3{,}6496\ A = 3{,}65\ A.$