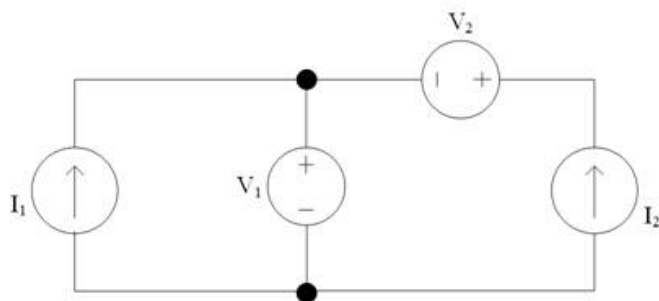|	
Started on	Wednesday, 14 September 2016, 11:58 AM
State	Finished
Completed on	Wednesday, 14 September 2016, 12:18 PM
Time taken	20 mins 2 secs
Grade	**100.00** out of 100.00

Question 1

Correct

Mark 40.00 out of 40.00

Quiz 2-1

Given: $I_1 = 13$ Amps $V_1 = 227$ Volts $I_2 = 2$ Amps $V_2 = 67$ Volts

What is the current through the voltage source V_1?
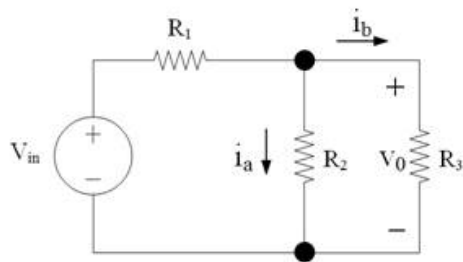
Answer: 15 ✔

Calculated

The correct answer is: 15.00

Quiz 2-2d

Given: $V_{in} = 30$ V (Volts)

$R_1 = 4 \, \Omega$ (Ohm) $R_2 = 20 \, \Omega$ (Ohm) $R_3 = 80 \, \Omega$ (Ohm)

a) Find the value of i_a. $i_a = \boxed{1.2}$ ✓ A

b) Find the value of v_0. $v_0 = \boxed{24}$ ✓ V

c) Find the power dissipated in each resistor.

$P_{R1} = \boxed{9}$ ✓ W $P_{R2} = \boxed{28.8}$ ✓ W $P_{R3} = \boxed{7.2}$ ✓ W

d) Find the power delivered by the V_{in} source.

$P_{Vin} = \boxed{-45}$ ✓ W

Remember: "-" = Delivering   "+" = Absorbing

Numeric Answer

a) $i_a = 1.20$ A
b) $v_0 = 24.0$ V
c) $P_{R1} = 9.0$ W $P_{R2} = 28.80$ W $P_{R3} = 7.20$ W
d) $P_{Vin} = -45.0$ W