For the circuit shown below:

a) What is the magnitude and direction of the current in the center loop?

b) What is the magnitude of $\varepsilon_2$?

\[ +20 \, \text{V} - (1)(7) - (2)(3) - \varepsilon_2 = 0 \]

\[ \varepsilon_2 = 7 \, \text{V} \]