Practice Problem 4.7

Use source transformation to find i_x in the circuit shown in Fig. 4.22.

 $\begin{array}{c|c}
5 \Omega \\
\downarrow i_x \\
\downarrow 10 \Omega
\end{array}$

Figure 4.22 For Practice Prob. 4.7.

Answer: 7.059 mA.

$$i_{x} = (24 - 0.4)i_{x} \cdot \frac{5}{15}$$

$$\Rightarrow i_{x} = \frac{24}{3.4} = 7.059 \text{ mA}$$