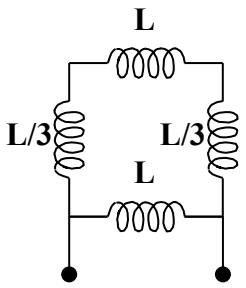
Chapter 6, Solution 56.

$$L \| L \| L = \frac{1}{\frac{3}{L}} = \frac{L}{3}$$

Hence the given circuit is equivalent to that shown below:



$$L_{eq} = L \left\| \left(L + \frac{2}{3}L \right) = \frac{Lx\frac{5}{3}L}{L + \frac{5}{3}L} = \frac{\mathbf{5}}{\mathbf{8}}\boldsymbol{L} \right.$$