We have seen that the current and the heat current can be written in terms of voltage and temperature differences in the form

\[ I = G_1 V + G_2 T \]

\[ I_Q = G_3 V + G_4 T \]

1.4a. A device is left open-circuited so that current is zero. The ratio of the heat current to the temperature difference is given by

   (a) \( G_Q \)

   (b) \( G_Q = \left( \frac{G_P G_S}{G} \right) \)

   (c) \( G_Q + \left( \frac{G_P G_S}{G} \right) \)

   (d) \( G_Q + G_P \)

   (e) None of the above

1.4b. The coefficients \( G_P \) and \( G_S \) are related by

   (a) \( G_P = T G_S \)

   (b) \( G_S = T G_P \)

   (c) \( G_P + G_S = T \)

   (d) \( G_P, G_S = T \)

   (e) None of the above, they are not related