1. **Problem**
   Given the following information:

   \[
   \begin{align*}
   \text{[-]} & + \text{[-]} + \text{[-]} = 564 \\
   \text{[-]} & + \text{[-]} + \text{[-]} = 873 \\
   \text{[-]} & + \text{[-]} + \text{[-]} = 864
   \end{align*}
   \]

   Compute:

   \[
   \begin{align*}
   \text{[-]} & + \text{[-]} + \text{[-]} = ?
   \end{align*}
   \]

   (a) 394
   (b) 555
   (c) 507
   (d) 873
   (e) 594

   **Solution**
   The information provided can be interpreted as the price for three fruit baskets with different combinations of the three fruits. This corresponds to a system of linear equations where the price of the three fruits is the vector of unknowns \( x \):

   \[
   \begin{align*}
   x_1 = \text{[-]}, & \quad x_2 = \text{[-]}, & \quad x_3 = \text{[-]}
   \end{align*}
   \]

   The system of linear equations is then:

   \[
   \begin{pmatrix}
   2 & 0 & 1 \\
   1 & 0 & 2 \\
   0 & 1 & 2
   \end{pmatrix}
   \begin{pmatrix}
   x_1 \\
   x_2 \\
   x_3
   \end{pmatrix}
   =
   \begin{pmatrix}
   564 \\
   873 \\
   864
   \end{pmatrix}
   \]

   This can be solved using any solution algorithm, e.g., elimination:

   \[
   x_1 = 85, \quad x_2 = 76, \quad x_3 = 394.
   \]

   Based on the three prices for the different fruits it is straightforward to compute the total price of the fourth fruit basket via:

   \[
   \begin{align*}
   \text{[-]} & + \text{[-]} + \text{[-]} = \\
   x_1 & + x_2 + x_3 = \\
   85 & + 76 + 394 = 555.
   \end{align*}
   \]