```
In[1]:=  B = {{1, 1, 1, 4}, {2, -3, 1, 2}, {-1, 2, -1, -1}};
         B
         RowReduce[B]
         Solve[{x == 2, y == 1, z == 1}, {x, y, z}]

Out[2]=  {{1, 1, 1, 4}, {2, -3, 1, 2}, {-1, 2, -1, -1}}

Out[3]=  {{1, 0, 0, 2}, {0, 1, 0, 1}, {0, 0, 1, 1}}

Out[4]=  {{x → 2, y → 1, z → 1}}


In[5]:=  Clear[B]
         B = {{1, 3, 1, 10}, {1, -2, -1, -6}, {2, 1, 2, 10}};
         B
         RowReduce[B]
         Solve[{x == 1, y == 2, z == 3}, {x, y, z}]

Out[7]=  {{1, 3, 1, 10}, {1, -2, -1, -6}, {2, 1, 2, 10}}

Out[8]=  {{1, 0, 0, 1}, {0, 1, 0, 2}, {0, 0, 1, 3}}

Out[9]=  {{x → 1, y → 2, z → 3}}


In[10]:=  Clear[B]
          B = {{1, 1, 2, -1}, {1, 3, -6, 7}, {2, -1, 2, 0}};
          B
          RowReduce[B]
          Solve[{x == 1, y == 0, z == -1}, {x, y, z}]

Out[12]=  {{1, 1, 2, -1}, {1, 3, -6, 7}, {2, -1, 2, 0}}

Out[13]=  {{1, 0, 0, 1}, {0, 1, 0, 0}, {0, 0, 1, -1}}

Out[14]=  {{x → 1, y → 0, z → -1}}


In[15]:=  Clear[B]
          B = {{2, 3, 1, -1}, {5, 1, 1, 9}, {3, 2, 4, 11}};
          B
          RowReduce[B]
          Solve[{x == 7/4, y == -19/8, z == 21/8}, {x, y, z}]

Out[17]=  {{2, 3, 1, -1}, {5, 1, 1, 9}, {3, 2, 4, 11}}
```

Out[18]= $\left\{\left\{1, 0, 0, \dfrac{7}{4}\right\}, \left\{0, 1, 0, -\dfrac{19}{8}\right\}, \left\{0, 0, 1, \dfrac{21}{8}\right\}\right\}$

Out[19]= $\left\{\left\{x \to \dfrac{7}{4}, y \to -\dfrac{19}{8}, z \to \dfrac{21}{8}\right\}\right\}$