

**Riviera International Academy**

**Assignment-2077**

**(Jestha 29, 2077, Thursday)**

**Class: Nine**

**Subject – Opt. Mathematics**

- a. Translate a point  $A(3, 5)$  under  $T_1 = \begin{pmatrix} 2 \\ -6 \end{pmatrix}$  to the point  $A'$ . Translate  $A'$  to  $A''$  under another translation  $T_2 = \begin{pmatrix} -3 \\ -2 \end{pmatrix}$ . Find the single translation which translates  $A$  to  $A''$ .
- b. Translate a point  $A(2, -4)$  under the translation  $T = \begin{pmatrix} 3 \\ 4 \end{pmatrix}$  to the point  $A'$ . Reflect  $A'$  on the line  $x = y$  to the point  $A''$ . Find the co-ordinates of  $A'$  and  $A''$ .

**Subject- Mathematics**

Source: Textbook of Mathematics 9

Homework: Read & write all definitions from 1.1.

**Subject- Science**

1. What is matter? What are the factors that must be present in a matter?
2. What is pure matter? Why elements are called pure matter? Write three examples of pure matter.
3. What is mixture? Write the differences between homogeneous and heterogeneous mixture.
4. What are sub-atomic particles? Write their name with symbols and charge. Also mention their location inside an atom.

**The End.**