

**Riviera International Academy**  
**Assignment-2077**  
**(Jestha 18, 2077, Sunday)**

**Class: Nine**

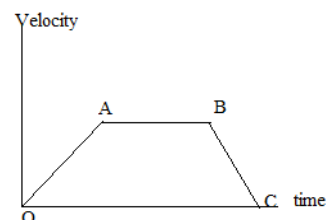
**Subject – Opt. Mathematics**

- a.  $\Delta MNS$  is rotated through  $90^\circ$  clockwise direction about  $A(2, 3)$ , find the co-ordinates of the vertices of its image under this rotation and draw  $\Delta MNS$  and its image on the same graph paper. Where coordinates of  $M, N$  and  $S$  are  $(-3, 0), (-5, 2)$  and  $(-4, 5)$  respectively.
- b.  $A(3, 1), B(3, -4)$  and  $C(6, -4)$  are the vertices of  $\Delta ABC$ . Let  $R$  be the rotation about origin through a certain angle. If the image of  $A(3, 1)$  under  $R$  is  $A'(-3, -1)$ , find the images of  $B$  and  $C$  under  $R$ .

**Subject- Science**

*(Dear students, read the class notes provided in Google Classroom to do the following questions)*

1. A bus is running with a velocity 72 Km/hr. On seeing a boy on the road 65m ahead, the driver jammed on the breaks and the bus stopped with uniform retardation  $5 \text{ m/s}^2$ . Calculate the distance travelled by the bus and discuss whether the accident took place or not?
2. A car of mass 500Kg travelling at 36 Km/hr is brought to rest over a distance of 40m. Find the retardation of the car and braking force.
3. A person has to run in the direction of the bus over some distance after getting down from a moving bus, why?
4. From the graph of velocity and time, answer the following questions.
  - a. In which portion of the curve is the velocity uniform?
  - b. In which portion of the curve is the velocity decreasing?
  - c. In which portion of the curve is acceleration zero?



**Subject- Social Studies**

**Answer these questions in short:**

1. What national identities have made our country known to the world? Make a list of any four of them and explain.
2. “Nepal is multi-ethnic, multicultural, multi-religious country”, justify this.
3. How has religious tolerance been maintained in Nepal? Mention with example.

**Source: The lesson is posted there in Google Classroom.**

**The End.**