BRAIN INTERNATIONAL SCHOOL

Mathematics Assignment   **Class: VIII**   **December' 2024**
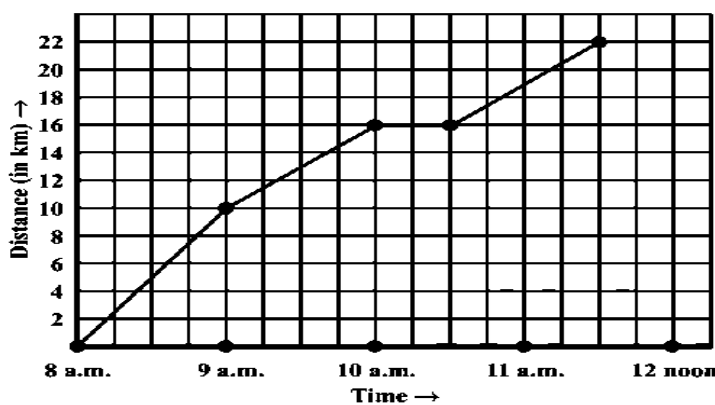
INTRODUCTION TO GRAPHS

1. The point Q (5,0) lies on

    (a) X-axis   (b) Y-axis   (c) origin   (d) a line parallel to X-axis

2. The incorrect statement from the following is

    (a) A line graph displays data that changes over time.

    (b) The independent variable is generally shown along *x*-axis.

    (c) The two axes in a line graph must have the same scale.

    (d) The graph of a linear equation is a straight line.

3. Plot each of the following points on the graph sheet. Verify that they lie on a line.
    (i) A (4,0), B (4,2), C (4,2.5) and D (4,6)
    (ii) P (1,1), Q (2,2), R (3,3) and S (4,4)
    (iii) L (6,2), M (5,3), N (3,5) and O (2,6)

4. Locate the points A (1, 2), B (4, 2) and C (1, 4) on graph sheet taking the suitable axes. Write the coordinates of the fourth point D in order to complete the rectangle ABCD.

5. Draw a line graph for the following data:

Month	May	June	July	August	September
Rainfall. (in cm)	3	7	4	6	4.5

   Also check if the graph linear or not?

6. Porter Courier Service is a platform to smoothen the process of sending packages and parcels. A courier-person rides from a town to a neighbouring suburban area to deliver a parcel to a merchant. His distance from the town at different times is shown by the following graph.

Based on the given information, answer the following questions:

    (a) How much time did the person take for the travel?

    (b) Did the person stop on his way? Explain.

    (c) During which period did he ride fastest?

    (d) At what speed did the courier person travelled between 9 am to 10 am?