

**Class-IX**

**Physics**

**Date:-24/04/2020**

**Chapter-8 (Motion)**

❖ Watch the video of science chapter-8 (Motion), Part-7 from **Optimum Online E-Learning Platform**

❖ Answer the following questions.

1. Draw distance-time graph for an object moving with constant velocity
2. Draw the velocity-time graph for an object moving with constant velocity

❖ Answers of the previous day homework

1. A bus starts from Darbhanga at 10:00am and reaches Patna at 12:00pm. The distance between Darbhanga and Patna is 140 km. Calculate the average speed of the bus.

**Answer-**

$$\text{Average speed} = \frac{\text{total distance travelled}}{\text{time taken}}$$

Or,  $V_a = \frac{S}{t}$

Given that,

$$S = 140\text{km}$$

$$t = 4 \text{ hours}$$

$$V_a = \frac{140\text{km}}{4 \text{ h}} = 35\text{km/h}$$

2. If the magnitude of displacement and the distance covered by a moving object are the same then what will be the nature of their path of travel?

**Answer-**

If the magnitude of displacement and total distance covered are equal, then the path is straight line



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