Universal Education

Time Speed and Distance

- **Compare the rates of two trains, one travelling at 45 km an hour and other at 10 m a second**

- **Man cover a certain distance by car during driving at 70km/hr and returns back to the starting point riding on a scooter at the speed of 55 km/hr. Find his average speed during the whole journey?**

- A man covers the boundary of a square field each side at different speeds, 10kmph, 20kmph, 30kmph and 40kmph respectively, in 10 hours. Find the total distance travelled by him.

- **A man covers certain distance between his house and office on scooter. Having an speed of 30 km/hr he is late by 10 min. However with speed of 40 km/hr he reaches his office 5 m earlier. Find the distance between the house and the office?**

- A train 125 m long passes a man, running at 5 km/hr in the same direction in which the train is going, in 10 seconds. The speed of the train is:

Two trains running in opposite directions cross a man standing on the platform in 27 seconds and 17 seconds respectively and they cross each other in 23 seconds. The ratio of their speeds is:

A train passes a station platform in 36 seconds and a man standing on the platform in 20 seconds. If the speed of the train is 54 km/hr, what is the length of the platform?

- A train 240 m long passes a pole in 24 seconds. How long will it take to pass a platform 650 m long?

- Two trains of equal length are running on parallel lines in the same direction at 46 km/hr and 36 km/hr. The faster train passes the slower train in 36 seconds. The length of each train is:

- The ratio between the speeds of two trains is 7 : 8. If the second train runs 400 km in 4 hours, then the speed of the first train is:

- A man's speed with the current is 15 km/hr and the speed of the current is 2.5 km/hr. The man's speed against the current is:

- A motorboat, whose speed is 15 km/hr in still water goes 30 km downstream and comes back in a total of 4 hours 30 minutes. The speed of the stream (in km/hr) is:

- In a 500 metres race, B starts 45 metres ahead of A, but A wins the race while B is still 35 metres behind. What is the ratio of the speeds of A to B assuming that both start at the same time? (UPSC-2015)
- (a) 25:21
- (b) 25: 20
- (c) 5:3
- (d) 5:7

- Two cities A and B are 360 km apart. A car goes from A to B with a speed of 40 km/hr and returns to A with a speed of 60 km/hr. What is the average speed of the
- car? (UPSC-2015)
- (a) 45 km/hr
- (b) 48 km/hr
- (c) 50 km/r
- (d) 55 km/hr

- A class starts at 11:00 am and lasts till 2:27 pm. Four periods of equal duration are held during this interval. After every period, a rest of 5 minutes is given to the students. The exact duration of each period is : (UPSC-2016)
- (a) 48 minutes
- (b) 50 minutes
- (c) 51 minutes
- (d) 53 minutes 5

- A and B walk around a circular park. They start at 8 a.m. from the same point in the, opposite directions. A and B walk at a speed of 2 rounds per hour and 3 rounds per hour respectively. How many times shall they cross each other after 8.00 a.m. and before 9.30. a.m. (UPSC-2016)

- 7
- 6
- 5
- 8