

TIME AND DISTANCE

- 1) With a uniform speed, a car covers the distance in 8 hrs. Had the speed been increased by 4km/h, the same distance could have been covered in 7.5hrs. What is the distance?
(a) 240 km (b) 480 km (c) 620 km (d) 640 km
- 2) A motor cyclist goes from Mumbai to Pune of 192km at a average speed of 32 km/h. Another man starts from Mumbai by car, 2.5 hrs after the first and reaches Pune half an hour earlier. What is the ratio of the speeds of the motor cycle and the car?
(a) 10:27 (b) 1:3 (c) 1:2 (d) 5:4
- 3) A car covers a distance of 528km in a certain time at a speed of 66 km/h. How much distance was a trip cover at an average speed which is 24 km/h less than that of the speed of the car in time which is 7 hrs more than that taken by the car?
(a) 336 km (b) 682 km (c) 598 km (d) 630 km (e) None
- 4) A person travels from P to Q at a speed of 40 km/hr and returns to Q by increasing his speed to 50 %. What is the average speed for both the trips?
(a) 36 km/hr (b) 45 km/hr (c) 48 km/hr (d) 50 km/hr (e) None
- 5) There is a hill behind a person's house. He walks up the top of the hill at a speed of 1.5km/hr, but walks down it at 4.5 km/hr. If it takes him 6 hrs for the entire journey, the distance (in km) from his house to the top of hill will be?
(a) 5.25 (b) 6 (c) 6.75 (d) 9
- 6) In a flight of 3000 km, an aircraft was slowed down by bad weather. If average speed for the trip was reduced by 100 km/h and the time increased by 1 hr. Find the original duration of the flight?
(a) 5 hrs (b) 6 hrs (c) 3 hrs (d) None
- 7) A plane left 30 minutes later than the scheduled time and in order to reach the destination 1500 km away in time, it had to increase the speed by 250 km/h from the usual speed. Its usual speed is?
(a) 720 km/h (b) 730 km/h (c) 740 km/h (d) 750 km/h
- 8) 'A' can walk from his house to office at 5 km/h and is late by 30 minutes. However, if he walks at 6 km/h, he is late by 5 minutes only. The distance of his office from his house is?
(a) 2.5 km (b) 3.6 km (c) 5.5 km (d) 12.5 km
- 9) The distance between two places A and B is 55 km. Two horsemen move from A and B towards each other at the speeds of 12 km/h and 10 km/h respectively. After what time will they be 11 km apart?
(a) 1.5 hrs (b) 2 hrs (c) 2.5 hrs (d) 2.25 hrs
- 10) By increasing the speed of the bus by 10 km/h, the time of journey for 72 km is reduced by 36 minutes, what was the original speed of the bus?
(a) 40 km/h (b) 35 km/h (c) 30 km/h (d) 45 km/h
- 11) A train 'A' crosses a stationery train 'B' in 50 seconds and a pole in 20 seconds with the same speed. The length of the train B (in metres) is?
(a) 360 (b) 260 (c) 300 (d) cannot be determined
- 12) The ratio of the length of two trains is 5:3 and the ratio of there speed is 6:5. The ratio of time taken by them to cross a pole is?
(a) 5:6 (b) 11:8 (c) 25:18 (d) 27:16

- 13) Train A crosses a pole in 25 seconds and another train B crosses a pole in 1 minute and 15 seconds. Length of train A is half the length of train B. What is the respective ratio between the speed of train A and train B?
 (a) 3:2 (b) 3:4 (c) 4:3 (d) None
- 14) Two trains of equal length take 10 seconds and 15 seconds respectively to cross telegraph post. If the length of each train be 120 metres, in what time will they cross each other travelling in opposite directions?
 (a) 16 (b) 15 (c) 12 (d) 10 (e) 14
- 15) Two trains start from station A and B and travel each other at speeds of 50 km/h and 60km/h respectively. At the time of their meeting, the second train has travelled 120 km more than the first. The distance between A and B is?
 (a) 1200 km (b) 1440 km (c) 1320 km (d) 990 km
- 16) A 270 m long train is running at a speed of 25 km/h, in what time will it cross a man coming from the opposite direction at a speed of 2 km/h?
 (a) 36 secs (b) 32 secs (c) 28 secs (d) 24 secs
- 17) Two trains of equal lengths are running on parallel lines in the same direction at 46 km/h and 36 km/h. The faster train passes the slower train in 36 seconds. The length of each train is?
 (a) 82 m (b) 50 m (c) 80 m (d) 72 m
- 18) The speed of a boat in still water is 15 km/h and the rate of stream is 5 km/h. The distance travelled downstream in 24 min is?
 (a) 4 km (b) 8 km (c) 6 km (d) 16 km (e) None
- 19) A man rows 40 km upstream in 8 hrs and a distance of 36 km downstream in 6 hrs, find the speed of stream?
 (a) 0.5 km/h (b) 5.5 km/h (c) 6 km/h (d) 5 km/h
- 20) A boat takes 3 hrs more while going upstream than in downstream. If the distance between two places is 40km and speed of boat in still water is 6.5km/h. What must be the speed of the boat in still water so that it can row downstream 40 km in 10 hrs?
 (a) 4 km/h (b) 3.5 km/h (c) 2.5 km/h (d) 2 km/h

For last 3 questions: u = speed of boat/swimmer in still water v = speed of the stream

Upstream = $u-v$ Downstream = $u+v$