TIME, SPEED, DISTANCE

1. Ratio between speeds of 2 trains is 5:3. If the first train runs 350 km in 2 hours, then what is the speed of the second train?
   a) 210 kmph b) 115 kmph c) 105 kmph d) 100 kmph
2. A man rows a boat at a speed of 5 km/hr in still water. Find the speed of a river if it takes him 1 hr to row a boat to a place 2.4 km away and return back.
   a) 1 km/hr b) 6 km/hr c) 3 km/hr d) 4 km/hr
3. 2 friends decide to race around a circular track of 300 metres. Parvati covers 5 metres per step and finishes the race in 45 seconds. Given that number of footsteps per second is same for both, how long are Rita's steps if she finishes 30 seconds later?
   a) 4 b) 3 c) 6 d) 10
4. Surekha travels 10 km to reach her office. She walks 0.5 km on foot at a speed of 8 kmph to catch her charted bus which travels at a speed of 40 kmph. Time taken by her to reach the office is:
   a) 15 min b) 20 min c) 18 min d) 30 min
5. Rajesh commutes daily by travelling 4/5 of the distance between his home and office by Metro train. 3/20 by auto and remaining 1 km on foot. The distance between his home and office is
   a) 12 km b) 16 km c) 24 km d) 20 km
6. A train Radhani starts from Suratkal at 5 a.m with the speed of 15 kmph. Another train Shatabdi starts from the same place in the same direction at 7 a.m with a speed of 20 kmph. At what time will both the trains meet each other?
   a) 3.00 p.m b) 2:00 p.m c) 12:00 p.m d) 1:00 p.m
7. Find the ratio of distances covered by a car and a cyclist when it is given that the car moves for 1.5 hours at 30 kmph and the cyclist moves for 1 hour at 25 kmph?
   a) 6:5 b) 9:5 c) 3:2 d) 5:1
8. Akhil travels first half of the distance at 50m/s and second half at 75m/s. The total distance travelled is 3km. Find his average speed of travel for the entire journey.
   a) 60m/s b) 62.5m/s c) 55m/s d) 65m/s
9. A scuba diver descends at a rate of 40 feet per minute. A diver dives from a ship to search for a lost ship at the depth of 3000 feet below sea level. How long will he take to reach the ship?
   a) 70 minutes b) 72 minutes c) 75 minutes d) 76 minutes
10. Consider the following parameters.
    A. A boat travels 300 metres upstream in 15 mins.
    B. Its speed downstream is 8/5 times its speed upstream.
    Which of the given options provides the correct relationship between speed of current and speed of the boat?
    a) Speed of the current = 12/10 times the speed of the boat
    b) Speed of the current = 3/13 times the speed of the boat
    c) Speed of the current = 12/10 times the speed of the boat
    d) Speed of the current = 9/3 times the speed of the boat
11. A train runs at a speed of 42 m/s and takes 35 seconds to pass a tunnel. After travelling some distance, it takes 15 seconds to pass a pole. What is the length of the tunnel?
    a) 162 m b) 630 m c) 840 m d) 240 m