TIME, SPEED AND DISTANCE-1_CSAT_QUESTIONS

1. Rahul travels at 100 kmph on the journey from A to B and returns at 150 kmph. Find his average speed for the journey.
   (A) 125 kmph (B) 110 kmph
   (C) 116 kmph (D) 120 kmph

2. **The speeds of three cars are in the ratio of 1 : 3 : 5. The ratio among the time taken by these cars to travel the same distance is:**
   (A) 3 : 5 : 15 (B) 15 : 3 : 5
   (C) 15 : 5 : 3 (D) 5 : 3 : 1

3. **A man is walking at a speed of 10 km/h. After every km, he takes a rest for 5 minutes. How much time will he take to cover a distance of 5 km?**
   (A) 60 minutes (B) 50 minutes
   (C) 40 minutes (D) 70 minutes

4. A car travelling with $\frac{4}{5}$ of its usual speed covers 200 km in 2 hours 30 minutes. What is the usual speed of the car?
   (A) 75 km/hr (B) 100 km/hr
   (C) 125 km/hr (D) 80 km/hr

5. Hari Narayan arrives at his office 15 minutes earlier than scheduled time if he drives his car at 42 km/hr. If he drives car at 35 km/hr, then he arrives 5 minutes late. Then find the distance of the office from his home.
   (A) 70 km (B) 210 km
   (C) 72 km (D) 60 km

6. Rahul walks a certain distance and rides back in 12 hours 30 minutes. He could ride both ways in 4 hours, then find the time required by Rahul to walk both ways.
   (A) 18 hours 30 minutes
   (B) 16 hours 30 minutes
   (C) 19 hours
   (D) 21 hours

7. If Rahul walks from his house to school at the rate of 8 km per hour, then he reaches the school 12 minutes earlier than the scheduled time. However, if he walks at the rate of 6 km per hour, then he reaches 12 minutes late. Find the distance of his school from his house.
   (A) 10 km (B) 9.6 km
   (C) 8.4 km (D) 9.5 km

8. When Rahul cycled at 20 km/hr, then he arrived at his office 9 minutes late. He arrived 6 minutes early, when he increased his speed by 10 km per hour. Then find the distance of his office from his house.
   (A) 20 km (B) 12 km
   (C) 15 km (D) 16 km

9. A is twice as fast runner as B, and B is thrice as fast runner as C. If C travelled a distance in 3 hours 36 minutes, then find the time taken by B to cover the same distance.
   (A) 48 minutes (B) 38 minutes
   (C) 54 minutes (D) 72 minutes

10. A car covers a distance in 80 min, if it runs at a speed of 75 kmph on an average. What will be the speed at which the car must run to reduce the time of journey to 60 min?
(A) 120 km/hr (B) 200 km/hr
(C) 150 km/hr (D) 100km/hr

11. A and B travel the same distance at speed of 9 km/hr and 10 km/ hr respectively. If A takes 36 minutes more than B, the distance travelled by each is:
(A) 48 km (B) 54 km
(C) 60 km (D) 66 km

12. A car covers four successive 12 km distances at speeds of 10 km/hour, 20 km/hour, 30 km/ hour and 40 km/hour respectively. Its average speed over this distance is:
(A) 16.8 km/hour (B) 19.2 km/hour
(C) 15 km/hour (D) 20 km/hour

13. A car covers a certain distance in 30 hours. If it reduces the speed by $\frac{1}{4}^{th}$, then the car covers 600 km less in that time. Then find the speed of car.
(A) 60 km/hr (B) 120 km/hr
(C) 80 km/hr (D) 50 km/hr

14. A boy walking at 9 km/hour crosses a square field diagonally in 1 minute. Then find the area of the field.
(A) 13000 m^2 (B) 15000 m^2
(C) 11250 m^2 (D) 12500 m^2

15. Two boys start together to walk a certain distance, one at 15 km/h and another at 12 km/h. The former arrives two hours before the latter, then find the distance.
(A) 80 km (B) 100 km
(C) 120 km (D) 90 km

16. Walking at three-fourth of his usual speed, a man covers a certain distance in 2 hours more than the time he takes to cover the distance at his usual speed. Then find the time taken by him to cover the distance with his usual speed.
(A) 4.5 hours (B) 5.5 hours
(C) 6 hours (D) 5 hours

17. Excluding stoppages, the speed of a train is 90 km/h and including stoppages, it is 75 km/h, then for how many minutes does the train stop per hour?
(A) 10 (B) 12
(C) 20 (D) 15

18. Amit covered a certain distance at some uniform speed. Had he moved 6 km/h faster, then he would have taken $\frac{5}{9}$ hours less. If he had moved 8 km/h slower, then he would have taken 1 hour more, then find the distance travelled?
(A) 240 km (B) 80 km
(C) 120 km (D) 75 km

19. The distance between the two poles x and y is 24 kilometers. From the first pole x, a person starts moving towards the other pole y at a speed of 8 km/hr. At the same time, a parrot sitting on the second pole y flies towards the first pole x and after reaching that person again flies back to the pole y and so on, until that person reaches the pole y. If the parrot was flying at a speed of 75 kilometers per hour, then find the total distance travelled by the parrot?
(A) 200 km (B) 50 km
(C) 225 km (D) 150 km

20. Ram travels a certain distance at a speed of x kilometers per hour and Ajit travels the same distance at a speed of y kilometers per hour. If x = (40% × a + 70% × b), y = (50% × a + 50% × b) and a > b, then find the relation between x and y.

(A) x > y

(B) x < y

(C) x = y

(D) Can't be determined