

Time and Distance : Classroom Assignment -2

1. A train 240 m long crosses a man running at 6 km/h in the opposite direction in 12 seconds. The same train crosses a platform in 24 seconds. What is the length of the platform?

- A) 320 m B) 340 m C) 360 m D) 380 m

2. Two trains of lengths 180 m and 220 m are moving in opposite directions at 54 km/h and 72 km/h respectively. How long will they take to completely cross each other?

- A) $10\frac{2}{3}$ sec B) $11\frac{2}{3}$ sec C) $12\frac{2}{3}$ sec
D) $13\frac{2}{3}$ sec

3. A train crosses a stationary man in 18 seconds and a platform 240 m long in 30 seconds. What is the length of the train?

- A) 300 m B) 320 m C) 360 m D) 400 m

4. A train moving at 72 km/h crosses another train of equal length moving in the opposite direction at 54 km/h in 8 seconds. What is the length of each train?

- A) 120 m B) 130 m C) 140 m D) 150 m

5. A person travels from A to B at 40 km/h and returns from B to A at 60 km/h. If the total journey takes 5 hours, what is the distance between A and B?

- A) 110 km B) 115 km C) 120 km
D) 125 km

6. A man covers the first half of a journey at 30 km/h, one-third of the remaining distance at 40 km/h, and the rest at 60

km/h. If the total time taken is 7 hours, what is the total distance?

- A) 240 km B) 252 km C) 270 km
D) 280 km

7. A car covers a certain distance at 45 km/h. If its speed were increased by 9 km/h, it would take 40 minutes less. Find the distance.

- A) 120 km B) 135 km C) 150 km
D) 180 km

8. A cyclist travels from A to B at 12 km/h and returns at 8 km/h. If the return journey takes 1 hour 15 minutes more, find the distance between A and B.

- A) 24 km B) 28 km C) 30 km D) 32 km

9. A man walks to a place at 5 km/h and returns by bicycle at 15 km/h. The total time taken is 4 hours. What is the distance between the two places?

- A) 12 km B) 15 km C) 18 km D) 20 km

10. A train covers a distance of 420 km. If its speed is reduced by 20 km/h, it takes 1 hour more. What is its original speed?

- A) 80 km/h B) 90 km/h C) 100 km/h
D) 105 km/h

11. A boat travels 48 km downstream in 4 hours and the same distance upstream in 6 hours. What is the speed of the boat in still water?

- A) 8 km/h B) 9 km/h C) 10 km/h
D) 12 km/h

12. A boat takes 3 hours to travel 30 km downstream and 5 hours to travel 30 km

upstream. How long will it take to travel 45 km in still water?

- A) 4 hours B) 4 hours 30 minutes
C) 5 hours D) 5 hours 15 minutes

13.Two persons start simultaneously from A and B towards each other. After meeting, the first person takes 4 hours to reach B, while the second takes 9 hours to reach A. If the first person's speed is 45 km/h, what is the speed of the second?

- A) 20 km/h B) 25 km/h C) 30 km/h
D) 35 km/h

14.Two runners run around a circular track of length 600 m in the same direction at 8 m/s and 5 m/s. After how much time will the faster runner overtake the slower runner for the third time?

- A) 300 sec B) 360 sec C) 400 sec
D) 450 sec

15.Two runners start simultaneously from opposite ends of a circular track of circumference 400 m and run in opposite directions at 7 m/s and 9 m/s. How many times will they meet in 10 minutes?

- A) 104 B) 105 C) 106 D) 107

16.A and B run around a circular track of 1,200 m. A completes one round in 80 seconds and B in 120 seconds. If they start together in the same direction, after how much time will A be exactly two rounds ahead of B?

- A) 240 sec B) 360 sec C) 480 sec
D) 540 sec

17.In a 500 m race, A beats B by 50 m, while B beats C by 75 m. If all run at constant speeds, by how many metres does A beat C?

- A) 110 m B) 115 m C) 120 m D) 125 m

18.A can complete a journey in 10 hours and B can complete the same journey in 15 hours. They start together, but A leaves after 3 hours. How much additional time will B require to complete the remaining journey?

- A) 7 hours B) 8 hours C) 9 hours
D) 10 hours

19.A man walks at 4 km/h and reaches his destination 30 minutes late. If he walks at 5 km/h, he reaches 6 minutes early. What is the distance?

- A) 10 km B) 11 km C) 12 km D) 15 km

20.A student travels to school at 5 km/h and arrives 12 minutes late. If he travels at 6 km/h, he arrives 8 minutes early. Find the distance between his home and school.

- A) 8 km B) 9 km C) 10 km D) 12 km

21.A man leaves home at 8:00 AM and walks at 6 km/h. His friend starts from the same place at 9 km/h exactly 30 minutes later. At what time will the friend catch him?

- A) 9:30 AM B) 9:45 AM C) 10:00 AM
D) 10:15 AM

22.A train leaves station A at 6:00 AM at 60 km/h. Another train leaves station B, 300 km from A, at 7:30 AM towards A at 80 km/h. At what time will they meet?

- A) 8:45 AM B) 9:00 AM C) 9:15 AM
D) 9:30 AM