

Time and Distance

1. A train travels 120 km at 40 km/hr and the next 180 km at 60 km/hr. What is its average speed?

- A) 48 km/hr
- B) 50 km/hr
- C) 52 km/hr
- D) 54 km/hr

Answer: A) 48 km/hr

2. Two trains are moving in opposite directions at speeds 60 km/hr and 40 km/hr, with lengths 150 m and 120 m, respectively. How long do they take to cross each other completely?

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

Answer: A) 12 sec

3. A man walks at 5 km/hr and reaches his school 10 minutes late. If he walks at 8 km/hr, he reaches 15 minutes early. What is the distance to school?

- A) 4 km
- B) 5 km
- C) 6 km
- D) 8 km

Answer: B) 5 km

4. A car travels 45 km downstream in 3 hr and returns in 5 hr. Find speed of stream if car's speed in still water is 15 km/hr.

- A) 2 km/hr
- B) 3 km/hr
- C) 4 km/hr
- D) 5 km/hr

Answer: B) 3 km/hr

5. A train running at 72 km/hr crosses a pole in 12 seconds. Find the length of the train.

A) 240 m

B) 250 m

C) 260 m

D) 270 m

Answer: A) 240 m

6. A cyclist goes 10 km at 10 km/hr and 20 km at 20 km/hr. What is average speed?

A) 13 km/hr

B) 14 km/hr

C) 15 km/hr

D) 16 km/hr

Answer: C) 15 km/hr

7. Two trains 120 m and 180 m long run on parallel tracks in opposite directions at speeds of 54 km/hr and 36 km/hr respectively. How long do they take to cross each other?

A) 16 sec

B) 18 sec

C) 15 sec

D) 20 sec

Answer: A) 16 sec

8. A boat covers 20 km upstream in 4 hours and the same distance downstream in 3 hours. What is speed of boat in still water?

A) 11 km/hr

B) 12 km/hr

C) 13 km/hr

D) 14 km/hr

Answer: B) 12 km/hr

9. Two persons start from the same place and travel in opposite directions at 10 km/hr and 8 km/hr. How far apart will they be after 2 hours?

- A) 36 km
- B) 32 km
- C) 30 km
- D) 28 km

Answer: B) 36 km

10. A train passes a man walking in the same direction at 4 km/hr in 12 seconds. If the length of the train is 120 m, what is the speed of train?

- A) 40 km/hr
- B) 44 km/hr
- C) 46 km/hr
- D) 50 km/hr

Answer: C) 46 km/hr

11. Train passes a platform 200 m long in 25 seconds at 72 km/hr. What is the length of train?

- A) 200 m
- B) 220 m
- C) 240 m
- D) 260 m

Answer: B) 220 m

12. A car covers half the distance at 30 km/hr and half at 60 km/hr. What is its average speed?

- A) 40 km/hr
- B) 45 km/hr
- C) 35 km/hr
- D) 48 km/hr

Answer: A) 40 km/hr

13. Two trains of length 140 m and 160 m are running in same direction at speeds of 40 km/hr and 60 km/hr, respectively. Find time taken for faster train to overtake slower train.

A) 14 sec

B) 16 sec

C) 18 sec

D) 20 sec

Answer: C) 18 sec

14. A man walks 5 km at 5 km/hr and cycles 15 km at 15 km/hr. What is his average speed?

A) 10 km/hr

B) 12 km/hr

C) 14 km/hr

D) 15 km/hr

Answer: A) 10 km/hr

15. A train 150 m long takes 20 sec to cross a man walking at 5 km/hr in the same direction as the train. What is speed of train?

A) 60 km/hr

B) 64 km/hr

C) 72 km/hr

D) 75 km/hr

Answer: A) 60 km/hr

16. Two trains 120 m and 150 m run in opposite directions at speeds 72 km/hr and 54 km/hr. How long do they take to cross each other?

A) 10 sec

B) 12 sec

C) 14 sec

D) 15 sec

Answer: B) 12 sec

17. A man travels first 8 km at 4 km/hr and next 24 km at 12 km/hr. What is his average speed?

A) 8 km/hr

B) 10 km/hr

C) 11 km/hr

D) 12 km/hr

Answer: B) 8 km/hr

18. Two trains start at same time from two points 300 km apart and travel towards each other at speeds 60 km/hr and 90 km/hr. After how much time will they meet?

A) 2 hours

B) 3 hours

C) 4 hours

D) 5 hours

Answer: A) 2 hours

19. A boat covers 42 km upstream in 6 hours and 42 km downstream in 4 hours. What is speed of boat in still water?

A) 9 km/hr

B) 10 km/hr

C) 11 km/hr

D) 12 km/hr

Answer: B) 10 km/hr

20. A car covers 100 km at 60 km/hr and 100 km at 40 km/hr. What is average speed?

A) 48 km/hr

B) 50 km/hr

C) 55 km/hr

D) 56 km/hr

Answer: A) 48 km/hr

21. A train running at 45 km/hr crosses a pole in 10 sec. What is the length of train?

A) 125 m

B) 100 m

C) 112.5 m

D) 90 m

Answer: C) 125 m

22. Two trains running in opposite directions pass a man in 12 s and 13 s, lengths are respectively 120 m and 130 m. What is the ratio of their speeds?

- A) 12:13
- B) 13:12
- C) 11:12
- D) 13:14

Answer: A) 12:13

23. A person walks 12 km at 4 km/hr and cycles 18 km at 9 km/hr. What is average speed?

- A) 6.3 km/hr
- B) 6.5 km/hr
- C) 7 km/hr
- D) 7.2 km/hr

Answer: C) 6 km/hr

24. If a boat takes 2 hrs to go 18 km upstream and 1 hr to return, speed of stream?

- A) 3 km/hr
- B) 4 km/hr
- C) 5 km/hr
- D) 2 km/hr

Answer: A) 3 km/hr

25. A train 240 m long passes a platform of 260 m in 24 sec. What is speed of train?

- A) 75 km/hr
- B) 80 km/hr
- C) 85 km/hr
- D) 90 km/hr

Answer: A) 75 km/hr

26. Two trains running at 54 km/hr and 72 km/hr cross each other in 10 sec, one is 100 m long. Find length of other.

A) 140 m

B) 150 m

C) 160 m

D) 170 m

Answer: B) 150 m

27. A cyclist covers a distance of 80 km at 20 km/hr and 40 km at 10 km/hr. Find average speed.

A) 16.7 km/hr

B) 17.5 km/hr

C) 18 km/hr

D) 19 km/hr

Answer: A) 16.7 km/hr

28. A car covers half the journey at 36 km/hr and other half at 54 km/hr. What is the average speed?

A) 42 km/hr

B) 44 km/hr

C) 45 km/hr

D) 48 km/hr

Answer: A) 43.2 km/hr

29. Two trains, each 100 m long, start simultaneously from two stations 1856 m apart towards each other. Speeds are 36 km/hr, 54 km/hr. Find time when they meet.

A) 20 min

B) 22 min

C) 24 min

D) 25 min

Answer: C) 22 min

30. A motorboat can travel 12 km downstream in 3 hours and 18 km upstream in 6 hours. What is speed of boat in still water?

- A) 5 km/hr
- B) 6 km/hr
- C) 7 km/hr
- D) 8 km/hr

Answer: B) 6 km/hr

31. A runner runs first 5 km at 6 km/hr, next 5 km at 8 km/hr. What is his average speed?

- A) 7 km/hr
- B) 7.2 km/hr
- C) 7.5 km/hr
- D) 8 km/hr

Answer: A) 6.857 km/hr

32. Two trains running in opposite directions pass a telegraph post in 14 sec and 16 sec, lengths are 140 m, 160 m. Find ratio of their speeds?

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

Answer: B) 8:7

33. A car covers 18 km at 36 km/hr and 36 km at 54 km/hr. What is average speed?

- A) 44 km/hr
- B) 48 km/hr
- C) 50 km/hr
- D) 52 km/hr

Answer: B) 48 km/hr

34. A train crossing a 200 m long platform in 30 sec at 60 km/hr. What is length of train?

- A) 300 m
- B) 350 m

C) 400 m

D) 450 m

Answer: B) 300 m

35. Two cars travel 420 km at 70 km/hr and return at 60 km/hr. Find average speed.

A) 64.6 km/hr

B) 65 km/hr

C) 66 km/hr

D) 67 km/hr

Answer: A) 64.6 km/hr

36. A man walks 20 km at 4 km/hr and cycles 48 km at 16 km/hr. What is average speed?

A) 10 km/hr

B) 12 km/hr

C) 14 km/hr

D) 16 km/hr

Answer: B) 12 km/hr

37. Train passes pole in 8 seconds at speed 45 km/hr. What is length of train?

A) 100 m

B) 120 m

C) 130 m

D) 140 m

Answer: C) 100 m

38. A car travels 100 km at 20 km/hr and 120 km at 30 km/hr. What is average speed?

A) 25.2 km/hr

B) 26 km/hr

C) 27 km/hr

D) 28 km/hr

Answer: B) 25.714 km/hr

39. A train crosses a 250 m long bridge in 35 sec at 72 km/hr. Find length of train.

- A) 250 m
- B) 300 m
- C) 350 m
- D) 400 m

Answer: B) 350 m

40. Two trains 120m, 140m long run at speeds 60 km/hr and 72 km/hr in opposite directions. Time taken to cross each other?

- A) 12 sec
- B) 14 sec
- C) 16 sec
- D) 18 sec

Answer: A) 12 sec

41. A man walks 12km at 4km/hr and runs 8km at 8km/hr. What is average speed?

- A) 5 km/hr
- B) 6 km/hr
- C) 7 km/hr
- D) 8 km/hr

Answer: A) 5.33 km/hr

42. Train passes a station 400 m long in 48 sec at 54 km/hr. Find length of train.

- A) 320 m
- B) 350 m
- C) 360 m
- D) 380 m

Answer: A) 320 m

43. Two trains running in opposite directions are 180 m, 240 m long; speeds 72 km/hr, 54 km/hr. Their time to cross each other?

A) 15 sec

B) 16 sec

C) 17 sec

D) 18 sec

Answer: A) 15 sec

44. A man rows 15 km upstream in 3 hr, same distance downstream in 1.5 hr. Find stream speed.

A) 2 km/hr

B) 3 km/hr

C) 4 km/hr

D) 5 km/hr

Answer: C) 2.5 km/hr

45. A cyclist travels 5 km at 15 km/hr, 10 km at 30 km/hr. What is his average speed?

A) 21 km/hr

B) 22.5 km/hr

C) 25 km/hr

D) 30 km/hr

Answer: A) 22.5 km/hr

46. Train passes platform 250 m long in 20 sec at 72 km/hr. Find length of train.

A) 150 m

B) 180 m

C) 200 m

D) 220 m

Answer: A) 150 m

47. Two trains running in same direction at 54 km/hr, 36 km/hr cross each other in 90 sec. First train 180 m. Find length of second.

A) 210 m

B) 220 m

C) 230 m

D) 240 m

Answer: C) 210 m

48. Man walks 8 km at 4 km/hr, cycles 24 km at 12 km/hr. What is average speed?

A) 8 km/hr

B) 10 km/hr

C) 12 km/hr

D) 14 km/hr

Answer: B) 10 km/hr

49. Boat covers 30 km downstream in 2 hr, returns in 3 hr. Stream speed?

A) 2 km/hr

B) 3 km/hr

C) 4 km/hr

D) 5 km/hr

Answer: A) 2 km/hr

50. Train passes 150 m long bridge in 20 sec at 54 km/hr. Length of train?

A) 150 m

B) 160 m

C) 170 m

D) 180 m

Answer: B) 180 m

51. A train 200 m long passes a tunnel 600 m long in 40 seconds. What is the speed of the train?

A) 72 km/hr

B) 75 km/hr

C) 80 km/hr

D) 81 km/hr

Answer: A) 72 km/hr

52. Two persons start at the same point, walk at speeds 4 km/hr and 5 km/hr in opposite directions. Find distance between them after 2 hours.

- A) 18 km
- B) 16 km
- C) 15 km
- D) 14 km

Answer: B) 18 km

53. A boat travels 18 km upstream in 3 hours and same distance downstream in 2 hours. Speed of stream?

- A) 2 km/hr
- B) 3 km/hr
- C) 4 km/hr
- D) 5 km/hr

Answer: B) 3 km/hr

54. A man cycles 20 km at 10 km/hr and returns at 20 km/hr. What is average speed for whole journey?

- A) 13.3 km/hr
- B) 14.5 km/hr
- C) 15 km/hr
- D) 16 km/hr

Answer: A) 13.3 km/hr

55. Two trains, 180 m and 220 m, run in opposite directions at 54 km/hr and 72 km/hr. When do they cross each other?

- A) 16 sec
- B) 18 sec
- C) 20 sec
- D) 22 sec

Answer: B) 18 sec

56. A man walks for 10 min at 6 km/hr and cycles 30 min at 12 km/hr. What is average speed for journey?

- A) 10 km/hr
- B) 12 km/hr
- C) 13 km/hr
- D) 14 km/hr

Answer: B) 10 km/hr

57. Train passes a platform 300 m long in 50 sec at 54 km/hr. Find length of train.

- A) 300 m
- B) 310 m
- C) 320 m
- D) 350 m

Answer: B) 310 m

58. A runner finishes 400 m race in 40 s. What is his speed in km/hr?

- A) 24 km/hr
- B) 27 km/hr
- C) 36 km/hr
- D) 40 km/hr

Answer: C) 36 km/hr

59. Two trains of equal length cross each other in 15 seconds when moving in opposite directions at 54 km/hr and 60 km/hr. Find each train's length.

- A) 150 m
- B) 170 m
- C) 180 m
- D) 190 m

Answer: A) 150 m

60. A train running at 54 km/hr passes a stationary man in 18 seconds. Find length of train.

A) 270 m

B) 280 m

C) 290 m

D) 300 m

Answer: A) 270 m

61. Boat covers 16 km downstream in 2 hours and 12 km upstream in 3 hours. Speed of stream?

A) 1 km/hr

B) 2 km/hr

C) 3 km/hr

D) 4 km/hr

Answer: B) 1 km/hr

62. Cyclist covers 8 km at 24 km/hr and 14 km at 42 km/hr. Find average speed.

A) 34 km/hr

B) 35 km/hr

C) 36 km/hr

D) 37 km/hr

Answer: A) 34 km/hr

63. A car travels 370 km in 5.5 hours. What is speed of car?

A) 66 km/hr

B) 67 km/hr

C) 68 km/hr

D) 69 km/hr

Answer: C) 67.2 km/hr

64. Man walks 5 km at 5 km/hr and cycles 10 km at 20 km/hr. What is average speed?

A) 10 km/hr

B) 11.3 km/hr

C) 12 km/hr

D) 13 km/hr

Answer: B) 11.3 km/hr

65. Two trains 200 m and 300 m long pass each other in 20 seconds, speeds being 60 km/hr and 90 km/hr. Find relative speed.

A) 150 km/hr

B) 120 km/hr

C) 100 km/hr

D) 90 km/hr

Answer: B) 150 km/hr

66. Distance between two cities is 210 km. Car covers first half at 42 km/hr, second half at 70 km/hr. Find average speed.

A) 54 km/hr

B) 56 km/hr

C) 60 km/hr

D) 62.5 km/hr

Answer: C) 54 km/hr

67. Train passes bridge 700 m long in 70 s at speed 108 km/hr. Find length of train.

A) 300 m

B) 350 m

C) 400 m

D) 440 m

Answer: A) 350 m

68. Two trains 120 m, 180 m long run opposite direction at 36 km/hr, 54 km/hr. How long do they take to cross each other?

A) 14 sec

B) 16 sec

C) 18 sec

D) 20 sec

Answer: B) 16 sec

69. Boat covers 20 km downstream in 2 hours and 15 km upstream in 3 hours. Speed of stream?

A) 1 km/hr

B) 2 km/hr

C) 3 km/hr

D) 4 km/hr

Answer: B) 2 km/hr

70. Car travels 48 km in 45 min. What is speed in m/s?

A) 17.7 m/s

B) 18 m/s

C) 19.5 m/s

D) 20 m/s

Answer: B) 17.77 m/s

71. Train passes a 120 m platform in 20 sec at 54 km/hr. Find length of train.

A) 180 m

B) 190 m

C) 200 m

D) 210 m

Answer: B) 180 m

72. Two trains, 100 m and 150 m long, cross parallel tracks in same direction at speeds 54 km/hr and 36 km/hr. Time to cross each other?

A) 50 sec

B) 55 sec

C) 45 sec

D) 40 sec

Answer: C) 50 sec

73. Boat speed in still water 15 km/hr, stream speed 5 km/hr. Downstream time for 45 km?

- A) 3 hr
- B) 2.5 hr
- C) 2 hr
- D) 1.5 hr

Answer: B) 2.5 hr

74. Man walks 40 km in 10 hours, spends an equal time running. Running speed is twice walking speed. Find average speed.

- A) 6 km/hr
- B) 8 km/hr
- C) 10 km/hr
- D) 12 km/hr

Answer: B) 8 km/hr

75. Train speeds: First half journey at 50 km/hr, second half at 100 km/hr. Average speed?

- A) 60 km/hr
- B) 66.67 km/hr
- C) 75 km/hr
- D) 80 km/hr

Answer: B) 66.67 km/hr

76. Car covers 120 km in 1.5 hours, what is speed in m/s?

- A) 20 m/s
- B) 22 m/s
- C) 24 m/s
- D) 25 m/s

Answer: C) 22.22 m/s

77. Two trains 200 m and 280 m long cross each other in 28 sec. Speeds 48 km/hr, 54 km/hr. Find time to cross each other.

- A) 28 sec

B) 30 sec

C) 32 sec

D) 34 sec

Answer: A) 28 sec

78. Cyclist covers 24 km at 16 km/hr and returns at 12 km/hr. Find average speed.

A) 13.7 km/hr

B) 14 km/hr

C) 15 km/hr

D) 16 km/hr

Answer: A) 13.71 km/hr

79. Train passes a man at 54 km/hr in 15 sec, length is?

A) 225 m

B) 250 m

C) 275 m

D) 300 m

Answer: B) 225 m

80. Car covers 90 km at 36 km/hr, next 130 km at 65 km/hr. Find average speed.

A) 51 km/hr

B) 54 km/hr

C) 56 km/hr

D) 60 km/hr

Answer: B) 51 km/hr

81. Boat covers 20 km upstream in 5 hr and same downstream in 3 hr. Speed of stream?

A) 2 km/hr

B) 3 km/hr

C) 4 km/hr

D) 5 km/hr

Answer: A) 2 km/hr

82. Train crosses 350 m long platform in 40 sec at 54 km/hr. Length of train?

A) 340 m

B) 350 m

C) 360 m

D) 370 m

Answer: C) 350 m

83. Two runners start from same point, go in opposite direction at 7 km/hr and 9 km/hr. How far after 2 hours?

A) 28 km

B) 30 km

C) 32 km

D) 34 km

Answer: B) 32 km

84. Boat covers 30 km downstream in 2 hours, upstream in 3 hours. Boat speed?

A) 12 km/hr

B) 13 km/hr

C) 14 km/hr

D) 15 km/hr

Answer: A) 12 km/hr

85. Man cycles 8 km at 16 km/hr and walks 4 km at 4 km/hr. Average speed?

A) 7.2 km/hr

B) 8 km/hr

C) 8.5 km/hr

D) 9 km/hr

Answer: A) 7.2 km/hr

86. Train passes two men walking in same direction at 5 km/hr and 6 km/hr in 22 sec and 20 sec. Train speed?

A) 48 km/hr

B) 54 km/hr

C) 60 km/hr

D) 66 km/hr

Answer: B) 54 km/hr

87. Man covers 15 km by walking and cycling. Walking speed 6 km/hr, cycling 18 km/hr, time spent cycling is $\frac{1}{3}$ walking time. Find total time.

A) 3 hr

B) 2 hr

C) 1 hr

D) 4 hr

Answer: B) 2 hr

88. Two trains of lengths 200 m and 400 m pass a man in 10 sec and 20 sec. Ratio of speeds?

A) 1:2

B) 2:1

C) 2:3

D) 3:2

Answer: A) 1:2

89. Runner completes a 2.5 km race in 6 minutes. What is speed in km/hr?

A) 25

B) 24

C) 30

D) 20

Answer: C) 25 km/hr

90. Train passes a pole in 9 sec at 72 km/hr. What is length of train?

A) 180 m

B) 190 m

C) 200 m

D) 210 m

Answer: A) 180 m

91. Boat speed in still water 10 km/hr. Stream speed 2 km/hr. Downstream time for 24 km?

A) 2 hr

B) 2.4 hr

C) 3 hr

D) 3.5 hr

Answer: B) 2 hr

92. Two trains moving in same direction at 90 km/hr and 80 km/hr cross each other in 27 sec, second train is 150 m. Length of first train?

A) 320 m

B) 240 m

C) 300 m

D) 150 m

Answer: C) 270 m

93. Train travels 180 km in 2 hrs 15 min. What is average speed?

A) 80 km/hr

B) 85 km/hr

C) 90 km/hr

D) 95 km/hr

Answer: C) 80 km/hr

94. Boy runs around a 110 m track for 20 rounds in 16 minutes. What is his speed?

A) 2.29 m/s

B) 2.35 m/s

C) 2.42 m/s

D) 2.5 m/s

Answer: A) 2.29 m/s

95. Train passes a pole in 20 sec at 54 km/hr. Length is?

A) 300 m

B) 320 m

C) 350 m

D) 400 m

Answer: A) 300 m

96. Person takes 4 hrs to cover distance at 4 km/hr. If speed increases by 2 km/hr, time taken is?

A) 2.5 hrs

B) 2.67 hrs

C) 3 hrs

D) 3.5 hrs

Answer: C) 2.67 hrs

97. Two trains of equal length running in opposite directions pass a pole in 20s and 30s. Ratio of their speeds?

A) 2:3

B) 3:2

C) 1:2

D) 2:1

Answer: B) 3:2

98. Man cycles 5 km at 10 km/hr, 10 km at 15 km/hr, and 5 km at 20 km/hr. Find average speed.

A) 12.8 km/hr

B) 13 km/hr

C) 13.5 km/hr

D) 14 km/hr

Answer: A) 12.8 km/hr

99. Train passes a platform 220 m long in 30 sec at 54 km/hr. Length of train?

A) 250 m

B) 270 m

C) 280 m

D) 300 m

Answer: A) 250 m

100. Man walks 6 km at 3 km/hr, then cycles 18 km at 9 km/hr. What is average speed?

A) 6 km/hr

B) 7 km/hr

C) 7.5 km/hr

D) 8 km/hr

Answer: B) 7 km/hr