

# TRAIN

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1. A train 110 m in length runs through a station at the rate of 36 km per hour. How long will it take to pass a given point?  
(1) 11 sec. (2) 12 sec. (3) 13 sec.  
(4) 15 sec. (5) None of these
2. A train 540 m long is running with a speed of 72 km/hr. In what time will it pass a tunnel 160 m long?  
(1) 40 sec. (2) 30 sec. (3) 35 sec.  
(4) 42 sec. (5) None of these
3. A train 200 m long is running with a speed of 72 km/hr. In what time will it pass a platform 160 m long?  
(1) 18 sec. (2) 21 sec. (3) 15 sec.  
(4) 20 sec. (5) None of these
4. Two trains 70 m and 80 m long respectively, run at the rates of 68 and 40 km an hour respectively on parallel rails in opposite directions. How long do they take to pass each other?  
(1) 5 sec. (2) 10 sec. (3) 12 sec.  
(4) 6 sec. (5) None of these
5. A train 110 metres long travels at 60 km/hr. How long does it take to cross another train 170 metres long, running at 54 km/hr. in the same direction?  
(1) 2 min 40 sec. (2) 2 min 48 sec.  
(3) 3 min 48 sec. (4) 3 min 40 sec.  
(5) None of these
6. Two trains travel in the same direction at 56 km and 29 km an hour and the faster train passes a man in the slower train in 16 seconds. Find the length of the faster train.  
(1) 100 m (2) 120 m (3) 124 m  
(4) Data inadequate (5) None of these
7. A train running at 24 km/hr takes 30 seconds to pass a platform. Next, it takes 10 seconds to pass a man walking at 12 km/hr in the opposite direction. Find the length of the train.  
(1) 50 m (2) 100 m (3) 75 m  
(4) 120 m (5) None of these
8. Two trains are moving in the opposite direction at 30 km and 24 km/hr. The faster train crosses a man in the slower train in 6 seconds. Find the length of the faster train.  
(1) 80 m (2) 100 m (3) 110 m  
(4) 90 m (5) None of these
9. A train running at 35 km per hour takes 18 seconds to pass a platform. Next, it takes 12 seconds to pass a man walking at the rate of 5 km/hr in the same direction. Find the length of the train and that of the platform.  
(1) 50 m, 75 m (2) 100 m, 75 m  
(3) 75 m, 25 m (4) 85 m, 55 m  
(5) None of these
10. A train running at 25 km/hr. takes 18 seconds to pass a platform. Next it takes 10 seconds to pass a man walking at the rate of 7 km/hr. in the same direction. Find the length of the platform and the length of the train.  
(1) 25m, 50m (2) 45m, 85m (3) 75m, 50m  
(4) 50m, 80m (5) None of these
11. 250 metres long train crosses a platform of length 350 metres in 50 seconds. Find the time of train to cross a bridge of 230 metres.  
(1) 45 sec. (2) 50 sec. (3) 40 sec.  
(4) 54 sec. (5) None of these
12. 60 metres long train crosses a tunnel of length 40 metres in 10 seconds. Find the time for train to cross a man standing on a platform of length 65 metres.  
(1) 6 sec. (2) 8 sec. (3) 5 sec.  
(4) 4 sec. (5) None of these
13. Two trains start at the same time from Patna and Gaya and proceed towards each other at the rate of 60 km and 40 km per hour respectively. When they meet, it is found that one train has travelled 20 km more than the other. Find the distance between Gaya and Patna.  
(1) 100 km (2) 80 km (3) 120 km  
(4) 90 km (5) None of these
14. Two stations A and B are 110 kms apart on a straight line. One train starts from A at 7 AM and travels towards B at 20 km/hr speed. Another train starts from B at 8 AM and travels towards A at 25 km/hr speed. At what time will they meet?  
(1) 9 AM (2) 10 AM (3) 11 AM  
(4) 11.5 AM (5) None of these
15. Two stations A and B are 60 km apart on a straight line. A train starts from A towards B at the rate of 20 km/hr. 3 hours later another train starts from B and travels towards A at the rate of 25 km/hr. When will the first train meet to the second train?  
(1) 1 hr. (2) 2 hrs. (3) 3 hrs.  
(4) 4 hrs. (5) None of these
16. A train travelling at a uniform speed, clears a platform 200 metres long in 10 seconds and passes a telegraph post in 6 seconds. Find the length of the train and its speed.  
(1) 300m, 180 km/hr. (2) 200m, 180 km/hr  
(3) 300m, 50 km/hr (4) 200 m, 50 km/hr  
(5) None of these

17. Two stations A and B are 95 km apart on a straight line. A train starts from A and travels towards B at 35 km/hr. Another train, starting from B 30 minutes earlier, travels towards A at 40 km/hr. When will the first train meet to the second train?  
 (1) 2 hrs. (2) 1 hr. (3) 1.5 hrs.  
 (4) 2.5 hrs. (5) None of these
18. Two trains of the same length but with different speeds pass a static pole in 5 seconds and 6 seconds respectively. In what time will they cross each other when they are moving in the same direction.  
 (1) 1 hr. (2) 50 sec. (3) 1 min  
 (4) 60 min (5) None of these
19. Two trains of the same length but with different speeds pass a static pole in 6 seconds and 9 seconds respectively. In what time will they cross each other when they are moving in the same direction.  
 (1) 6 sec. (2) 30 sec. (3) 40 sec.  
 (4) 42 sec. (5) None of these
20. Two trains of the same length but with different speeds pass a static pole in 4 seconds and 8 seconds respectively. In what time will they cross each other when they are moving in the opposite direction.  
 (1)  $5\frac{1}{3}$  sec. (2) 5 sec. (3) 6 sec.  
 (4) 5.3 sec. (5) None of these
21. Two trains of the same length but with different speeds pass a static pole in 10 seconds and 15 seconds respectively. In what time will they cross each other when they are moving in the opposite direction.  
 (1) 13 sec. (2) 11 sec. (3) 12.5 sec.  
 (4) 12 sec. (5) None of these
22. Two trains of the length 200 m and 250 m respectively with different speeds pass a static pole in 8 seconds and 14 seconds respectively. In what time will they cross each other when they are moving in the same direction?  
 (1) 63 sec. (2) 64 sec. (3) 72 sec.  
 (4) 81 sec. (5) None of these
23. Two trains of the length 100m and 150m respectively with different speeds pass a static pole in 1 min and 3 min respectively. In what time will they cross each other when they are moving in the opposite direction?  
 (1)  $\frac{5}{3}$  sec. (2) 100 sec. (3) 120 sec.  
 (4) 50 sec. (5) None of these
24. Two trains of the length 200 m and 100 m respectively pass a static pole in 6 seconds and 5 seconds respectively. In what time will they cross each other when they are moving in opposite direction.  
 (1) 4.5 sec. (2) 5.625 sec. (3) 6 sec.  
 (4) 6.5 sec. (5) None of these
25. Two trains 130 and 110 metres long, while going in the same direction, the faster train takes one minute to pass the other completely. If they are moving in opposite direction, they pass each other completely in 3 seconds. Find the speed of trains.  
 (1) 24 m/sec., 19 m/sec. (2) 42 m/sec., 38 m/sec.  
 (3) 40 m/sec., 36 m/sec. (4) Data inadequate  
 (5) None of these
26. Two trains running at the rates of 45 and 36 km an hour respectively, on parallel rails in opposite directions, are observed to pass each other in 8 seconds, and when they are running in the same direction at the same rate as before, a person sitting in the faster train observes that he passes the other in 30 seconds. Find the length of the trains.  
 (1) 105 m, 75m (2) 50m, 25m  
 (3) 120m, 90m (4) 100m, 75m  
 (5) None of these
27. A train 75 metres long overtook a man who was walking at the rate of 6 km/hr. and passed him in 18 seconds. Again, the train overtook a second person in 15 seconds. At what rate was the second person travelling?  
 (1) 3 km/hr. (2) 5 km/hr. (3) 8 km/hr.  
 (4) 9 km/hr. (5) None of these
28. A train passes two men walking in the direction opposite to the train at 7 m/sec. and at 12m/sec. in 5 and 4 seconds respectively. Find the length of the train.  
 (1) 100 m (2) 120 m (3) 75 m  
 (4) 125 m (5) None of these
29. A train 120 m in length passes a pole in 12 seconds and another train of the length 100 m travelling in opposite directions in 10 seconds. Find the speed of the second train in km per hour.  
 (1) 43.2 km/hr. (2) 43 km/hr. (3) 44 km/hr.  
 (4) 43.5 km/hr. (5) None of these
30. A train crosses 420 metres and 244 metres long bridge in 50 seconds and 34 seconds respectively. Find the length and speed of the train.  
 (1) 10 m, 44 m/sec. (2) 130 m, 22 m/sec.  
 (3) 130 m, 11 m/sec. (4) 65 m, 11 m/sec.  
 (5) None of these
31. A train 192 metres in length passes a pole in 12 seconds and another train of the length 288 metres travelling in the same direction in 48 seconds. Find the speed of the seconds train.  
 (1) 42.6 km/hr. (2) 32.4 km/hr.  
 (3) 32 km/hr. (4) 21.6 km/hr.  
 (5) None of these

32. A good train and a passenger train are running on parallel tracks in the same direction. The driver of the goods train observes that the passenger train coming from behind overtakes and crosses his train completely in 30 seconds. Whereas a passenger on the passenger train marks that he crosses the goods train in 20 seconds. If the speeds of the trains be in the ratio of 1 : 2, find the ratio of their lengths.
- (1) 3 : 2                      (2) 3 : 1                      (3) 2 : 1  
(4) 4 : 1                      (5) None of these
33. A train after travelling 60 km meets with an accident and then proceeds at  $\frac{2}{3}$  of its former speed and arrives at its destination 40 minutes late. Had the accident occurred 30 km further, it would have reached the destination only 20 minutes late. Find the speed of the train and the distance which the train travels.
- (1) 45 km/hr, 90 km      (2) 60 km/hr, 120 km  
(3) 45 km/hr, 120 km      (4) 47 km/hr, 95 km  
(5) None of these
34. A train after travelling 100 km meets with an accident and then proceeds at  $\frac{3}{5}$  of its former rate and arrives at the terminus 48 minutes late. Had the accident happened 30 km further on, it would have arrived 24 minutes sooner. Find the rate of the train and the distance.
- (1) 50 km/hr, 160 km      (2) 45 km/hr, 150 km  
(3) 50 km/hr, 150 km      (4) 50 km/hr, 120 km  
(5) None of these
35. A train meets with an accident 5 hours after starting, which detains it for 1 hour, after which it proceeds at 40% of its original speed. It arrives at the destination 6 hours late. Had the accident taken place 200 km farther along the railway line, the train would have arrived only 5 hours late. Find the length of the trip and the original speed of the train.
- (1) 300 km/hr, 2500 km      (2) 200 km/hr, 1650 km  
(3) 350 km/hr, 1850 km      (4) 250 km/hr, 1700 km  
(5) None of these
36. A train covers a distance between stations A and B in 2 hours. If the speed is reduced by 6 km/hr, it will cover the same distance in 3 hours. What is the distance between the two stations A and B (in km)? Also, find the speed of the train.
- (1) 36 km, 18 km/hr.      (2) 42 km, 21 km/hr  
(3) 18 km, 9 km/hr      (4) 28 km, 14 km/hr.  
(5) None of these
37. Two places P and Q are 92 km apart. A train leaves P for Q and at the same time another train leaves Q for P. Both the trains meet 4 hrs. after they start moving. If the train travelling from P to Q travels 7 km/hr. faster than the other train, find the speed of the two trains.
- (1) 15 km/hr, 8 km/hr.      (2) 12 km/hr, 8 km/hr.  
(3) 12 km/hr, 9 km/hr      (4) 15 km/hr, 9 km/hr  
(5) None of these
38. Two trains A and B start from Lucknow and Delhi towards Delhi and Lucknow respectively. After passing each other they take 4 hours and 9 hours to reach Delhi and Lucknow respectively. If the train from Lucknow is moving at 60 km/hr. Then find the speed of the other train.
- (1) 40 km/hr.      (2) 30 km/hr.      (3) 35 km/hr.  
(4) 50 km/hr.      (5) None of these
39. The speeds of two trains are in the ratio of 2 : 3. They are moving on the opposite directions on parallel tracks. The first train crosses a telegraph pole in 10 seconds whereas the second train crosses the pole in 15 seconds. Find the time taken by the trains to cross each other completely.
- (1) 23 sec.      (2) 14 sec.      (3) 13 sec.  
(4) 16 sec.      (5) None of these
40. A train with 36 km/hr. crosses a bridge in 18 seconds. Another train 90 metres shorter crosses the same bridge at 27 km/hr. Find the time taken by the second train to cross the bridge.
- (1) 20 sec.      (2) 18 sec.      (3) 16 sec.  
(4) 12 sec.      (5) None of these

#### TRAIN

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|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1. (1)  | 2. (3)  | 3. (1)  | 4. (1)  | 5. (2)  | 6. (2)  | 7. (2)  | 8. (4)  | 9. (2)  | 10. (3) |
| 11. (3) | 12. (1) | 13. (1) | 14. (2) | 15. (3) | 16. (1) | 17. (2) | 18. (3) | 19. (1) | 20. (1) |
| 21. (4) | 22. (1) | 23. (2) | 24. (2) | 25. (2) | 26. (1) | 27. (1) | 28. (1) | 29. (1) | 30. (3) |
| 31. (4) | 32. (3) | 33. (3) | 34. (1) | 35. (1) | 36. (1) | 37. (1) | 38. (1) | 39. (3) | 40. (4) |