

EduSahara™ Learning Center Assignment

Grade : Class VIII, ICSE
Chapter : Time and Distance
Name : Relative Speed Concepts
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- In how much time will a train A of length 256.67 mt travelling at a speed of 8.41 m/sec will
1. cross another train B of length 275.53 mt travelling in the same direction at a speed of 7.02 m/sec?

(i) 382.88 sec (ii) 381.88 sec (iii) 384.88 sec (iv) 380.88 sec (v) 383.88 sec

- In how much time will a train A of length 291.88 mt travelling at a speed of 23.52 m/sec will
2. cross another train B of length 288.89 mt travelling in the opposite direction at a speed of 8.98 m/sec?

(i) 19.87 sec (ii) 15.87 sec (iii) 17.87 sec (iv) 18.87 sec (v) 16.87 sec

- In how much time will a train of length 354.28 mt travelling at a speed of 25.58 m/sec
3. crosses a man riding a cycle in the same direction at a speed of 7.79 m/sec?

(i) 20.91 sec (ii) 21.91 sec (iii) 18.91 sec (iv) 17.91 sec (v) 19.91 sec

- In how much time will a train of length 270.09 mt travelling at a speed of 13.71 m/sec
4. crosses a man riding a cycle in the opposite direction at a speed of 11.42 m/sec?

(i) 12.75 sec (ii) 8.75 sec (iii) 11.75 sec (iv) 9.75 sec (v) 10.75 sec

- A motor boat can move at a speed of 27.82 m/sec in still water. If it goes upstream for
5. 200.97 sec, it travels a distance of 4150.00 mt. What is the speed of the stream?

(i) 8.17 m/sec (ii) 5.17 m/sec (iii) 9.17 m/sec (iv) 7.17 m/sec (v) 6.17 m/sec

- A motor boat can move at a speed of 10.53 m/sec in still water. If it goes downstream for
6. 189.03 sec, it travels a distance of 3308.00 mt. What is the speed of the stream?

(i) 5.97 m/sec (ii) 7.97 m/sec (iii) 6.97 m/sec (iv) 8.97 m/sec (v) 4.97 m/sec

- A motor boat can travel at a speed of 33.25 m/sec downstream and 8.71 m/sec upstream.
7. What is the speed of the motor boat in still water?

(i) 18.98 m/sec (ii) 19.98 m/sec (iii) 20.98 m/sec (iv) 22.98 m/sec (v) 21.98 m/sec

- A motor boat can travel at a speed of 32.91 m/sec downstream and 2.99 m/sec upstream.
8. What is the speed of the stream?

(i) 13.96 m/sec (ii) 15.96 m/sec (iii) 16.96 m/sec (iv) 12.96 m/sec (v) 14.96 m/sec

- A motor boat can travel at a speed of 34.09 m/sec downstream and 2.79 m/sec upstream.
9.

How much distance can the boat travel in 23.69 sec in still water?

- (i) 434.84 mt (ii) 435.84 mt (iii) 437.84 mt (iv) 436.84 mt (v) 438.84 mt
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10. A motor boat can travel at a speed of 18.96 m/sec downstream and 6.48 m/sec upstream. How much time will it take to cross a distance of 488.70 mt in still water?

- (i) 38.42 sec (ii) 39.42 sec (iii) 37.42 sec (iv) 36.42 sec (v) 40.42 sec
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11. The speed of a motor boat is 19.92 m/sec and the speed of a stream is 9.36 m/sec. A & B are two location adjacent to a stream. If it takes 134.77 sec to go from point A to B and come back, What is the distance between A and B?

- (i) 1043.95 mt (ii) 1044.95 mt (iii) 1045.95 mt (iv) 1046.95 mt (v) 1047.95 mt
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12. The speed of a motor boat is 21.43 m/sec and the speed of a stream is 11.43 m/sec. A & B are two location adjacent to a stream. If the distance between A and B is 2071.00 mt, how much time will it take to go from A to B and back to A?

- (i) 271.12 sec (ii) 270.12 sec (iii) 268.12 sec (iv) 272.12 sec (v) 269.12 sec
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13. The distance between two places X and Y is 373.90 mt. Two persons A and B start simultaneously at X and Y at speeds of 7.64 m/sec and 7.36 m/sec respectively. Find when they meet each other if they are travelling in same direction.

- (i) 1333.36 sec (ii) 1335.36 sec (iii) 1334.36 sec (iv) 1336.36 sec (v) 1337.36 sec
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14. The distance between two places X and Y is 177.56 mt. Two persons A and B start simultaneously at X and Y at speeds of 4.75 m/sec and 3.79 m/sec respectively. Find when they meet each other if they are travelling in opposite direction.

- (i) 19.79 sec (ii) 21.79 sec (iii) 22.79 sec (iv) 18.79 sec (v) 20.79 sec
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15. The distance between two places X and Y is 447.11 mt. Two persons A and B start simultaneously at X and Y at speeds of 10.15 m/sec and 9.49 m/sec respectively. Find the meeting point away from X where they meet each other if they are travelling in same direction.

- (i) 6878.01 mt (ii) 6875.01 mt (iii) 6877.01 mt (iv) 6874.01 mt (v) 6876.01 mt
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16. The distance between two places X and Y is 352.14 mt. Two persons A and B start simultaneously at X and Y at speeds of 25.01 m/sec and 20.89 m/sec respectively. Find the meeting point away from X where they meet each other if they are travelling in opposite direction.

- (i) 191.87 mt (ii) 189.87 mt (iii) 193.87 mt (iv) 192.87 mt (v) 190.87 mt
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17. In a 2200 mt race, A beats B by 73.37 mt and C by 604.96 mt. In a 4500 mt race, by how much distance does B beat C?

- (i) 1086.33 mt (ii) 1085.33 mt (iii) 1089.33 mt (iv) 1088.33 mt (v) 1087.33 mt
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'P' and 'Q' are at a distance of 410.00 km apart. 'A' starts from 'P' at 08:28 AM and reaches 18. 'Q' at 00:37 PM. 'B' starts from 'Q' at 00:09 PM and reaches 'P' at 08:09 PM. Find the distance between point P and the point where they overtake each other.

- (i) 393.12 km (ii) 396.12 km (iii) 392.12 km (iv) 394.12 km (v) 395.12 km
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'P' and 'Q' are at a distance of 580.00 km apart. 'A' starts from 'P' at 06:57 AM and reaches 19. 'Q' at 00:50 PM. 'B' starts from 'Q' at 10:44 AM and reaches 'P' at 06:38 PM. At what time they overtake each other?

- (i) 10:56 AM (ii) 11:26 AM (iii) 00:56 PM (iv) 00:26 PM (v) 11:56 AM
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Assignment Key

- 1) (i)
- 2) (iii)
- 3) (v)
- 4) (v)
- 5) (iv)
- 6) (iii)
- 7) (iii)
- 8) (v)
- 9) (iv)
- 10) (i)
- 11) (iii)
- 12) (ii)
- 13) (ii)
- 14) (v)
- 15) (v)
- 16) (i)
- 17) (v)
- 18) (iv)
- 19) (v)