

BOATS & STREAMS

1. A man rows upstream 11 km and downstream 26 km taking 5 hours each time. The velocity of the current is km/hr.
(1) 1 km/hr (2) 1.3 km/hr
(3) 1.5 km/hr (4) 2.5 km/hr
(5) None of these
2. The speed of a boat downstream is 15 km/hr and the speed of the stream is 1.5 km/hr. The speed of the boat upstream is
(1) 13.5 km/hr (2) 16.5 km/hr
(3) 5.25 km/hr (4) 7.5 km/hr
(5) None of these
3. A boat moves downstream at the rate of 12 km/hr and upstream at 4 km/hr. Find the speed of the boat in still water and also the speed of current.
(1) 7 km/hr, 2 km/hr
(2) 6 km/hr, 2 km/hr
(3) 7 km/hr, 1 km/hr
(4) 7.5 km/hr, 1.5 km/hr
(5) None of these
4. A man can row $2\frac{7}{9}$ metres per second and upstream at the rate of 5 km/hr. Find the man's rowing rate in still water and speed of current.
(1) 8 km/hr, 3 km/hr
(2) 7.5 km/hr, 3 km/hr
(3) 7.5 km/hr, 1 km/hr
(4) 5.5 km/hr, 1.5 km/hr
(5) None of these
5. A man can row 60 km downstream in 6 hours. If the speed of the current is 3 km/hr, then find in what time will he be able to cover 16 km upstream?
(1) 4.5 hours (2) 4 hours
(3) 5 hours (4) 5.5 hours
(5) None of these
6. A man can row three quarters of a km against the stream in $11\frac{1}{4}$ minutes and return in $7\frac{1}{2}$ minutes. Find the speed of the man in still water. What is the speed of the stream?
(1) 5 km/hr, 1 km/hr
(2) 6 km/hr, 2 km/hr
(3) 4 km/hr, 1 km/hr
(4) 6 km/hr, 1 km/hr
(5) None of these
7. A man rows upstream 13 km and downstream 28 km taking 5 hours each time. What is the velocity of the current?
(1) 1.5 km/hr (2) 3 km/hr
(3) 2.5 km/hr (4) 4 km/hr
(5) None of these
8. A boat is rowed down a river at 10 km/hr and up the river at $4\frac{3}{4}$ km/hr. Find the velocity of the river.
(1) $2\frac{1}{2}$ km/hr (2) $2\frac{3}{8}$ km/hr
(3) $2\frac{3}{4}$ km/hr (4) $2\frac{5}{8}$ km/hr
(5) None of these
9. A boat takes 9 h to travel a distance upstream and takes 3 h to travel the same distance downstream. If the speed of the boat in still water is 4 km/hr, what is the velocity of the stream?

- (1) 4 km/hr (2) 3 km/hr
 (3) 6 km/hr (4) 2 km/hr
 (5) None of these

10. A boat running downstream covers a distance of 16 km in 2 hr while for covering the same distance upstream it takes 4 hr. What is the speed of the boat in still water?

- (1) 4 km/hr
 (2) 6 km/hr
 (3) 8 km/hr
 (4) Data inadequate
 (5) None of these

11. The speed of a boat in still water is 12 km/hr and rate of flow of steam is 4 km/hr. If it travels upstream for 3 h 15 min, find the distance (jn km) travelled by the boat during this journey.

- (1) 24 km (2) 25 km
 (3) 26 km (4) 27 km
 (5) None of these

12. In one hour, a boat goes 11 km along the stream and 5 km against the stream. The speed of the boat in still water is

- (1) 10 kmph (2) 8kmph
 (3) 4kmph (4) 8kmph
 (5) None of these

13. A man can row upstream at 8 kmph and downstream at 13 kmph. The speed of stream is

- (1) 3.5 kmph (2) 2.5 kmph
 (3) 3 kmph (4) 4 kmph
 (5) None of these

14. A man rows downstream 32 km and 14 km upstream. If he takes 6 hours to cover each distance, then the velocity of the current is

- (l) 3km/hr (2) 2km/hr
 (3) 2.5 km/hr (4) 1.33km/hr
 (5) None of these

15. A boat running downstream covers a distance of

16 km in 2 hours while for covering the same distance upstream it takes 4 hours. What is the speed of the boat in still water ?

- (1) 2 km/hr (2) 6 km/hr
 (3) 5 km/hr (4) 4 km/hr
 (5) None of these

16. A boatman goes 2 km against the current of the stream in 1 hour and goes 1 km along the current in 10 minutes. How long will it take to go 5 km in stationary water ?

- (1) 1.5 hr (2) 1 hr
 (3) 2 hr (4) 3 hr
 (5) None of these

17. A man can row three-quarters of a kilometer against the stream in 11.25 minutes. The speed of the man in still water is

- (1) 12 kmph
 (2) 10 kmph
 (3) 6 kmph
 (4) Data inadequate
 (5) None of these

18. A man takes twice as long to row against the stream as to row the same distance in favor of the stream. The ratio of the speed of the boat and the stream is

- (1) 2 : 1 (2) 5 : 2
 (3) 3 : 1 (4) 2 : 3
 (5) None of these

19. A boat running upstream takes 8 hours 48 minutes to cover a certain distance , while it takes 4 hours to cover the same distance running downstream. What is the ratio between the speed of the boat and speed of the water current respectively?

- (1) 60 : 17 (2) 61 : 21
 (3) 2 : 3 (4) 3 : 1
 (5) None of these

20. If a boat goes 7 km upstream in 42 minutes and the speed of the stream is 3 kmph , then the speed

of the boat in still water is

- (1) 9 kmph (2) 12 kmph
- (3) 7 kmph (4) 13 kmph
- (5) None of these

21. A man's speed with the current is 15 km/hr and the speed of the stream is 2.5 km/hr. The man's speed against the current is

- (1) 10 km/hr (2) 12 km/hr
- (3) 5 km/hr (4) 15 km/hr
- (5) None of these

22. If a man rows at the rate of 5 kmph in still water and his rate against the current is 3.5 kmph, then the man's rate along the current is

- (1) 4 kmph (2) 2 kmph
- (3) 6.5 kmph (4) 3 kmph
- (5) None of these

23. A boat can travel with a speed of 13 km/hr in still water. If the speed of the stream is 4 km/hr, find the time taken by the boat to go 68 km downstream

- (1) 2 hr (2) 3 hr
- (3) 5 hr (4) 4 hr
- (5) None of these

24. Speed of a boat in standing water is 9 km/h and the speed of the stream is 1.5 km/hr. A man rows to a place at a distance of 105 km and comes back to the starting point. The total time taken by him is

- (1) 24 hr (2) 20 hr
- (3) 30 hr (4) 15 hr
- (5) None of these

25. The speed of a boat in still water is 15 km/hr and the rate of current is 3 km/hr. The distance travelled downstream in 12 minutes is

- (1) 2 km/hr (2) 3.6 km/hr
- (3) 2.5 km/hr (4) 4 km/hr
- (5) None of these

26. A man can row at 5 kmph in still water. If the speed of current is 1 kmph and it takes him 1 hour to row to a place and come back, how far is the place?

- (1) 3.5 km (2) 3 km
- (3) 2.4 km (4) 5 km
- (5) None of these

27. A swimmer covers a distance of 28 km against the current and 40 km in the direction of the current. If in each case he takes 4 hours, then the speed of the current is

- (1) 3.5 km/h (2) 1.5 km/h
- (3) 2.5 km/h (4) 1.5 km/h
- (5) None of these

28. A boat moves downstream at the rate of one km in 10 minutes and upstream at the rate of 4 km an hour. What is the velocity of the current

- (1) 5 km/h (2) 3 km/h
- (3) 1 km/h (4) 2 km/h
- (5) None of these

29. If a man's rate with the current is 12 km/h and the rate of the current is $1\frac{1}{2}$ km/h, then his rate against the current is

- (1) 13 km/h (2) 7 km/h
- (3) 9 km/h (4) 6 km/h
- (5) None of these

30. A boatman can row 2 km against the stream in 20 minutes and return in 18 minutes. Find the rate of current.

- (1) $\frac{1}{3}$ km/h (2) $\frac{2}{3}$ km/h
- (3) $\frac{5}{3}$ km/h (4) $\frac{3}{2}$ km/h
- (5) None of these

31. A boatman can row 48 km downstream in 4 h. If the speed of the current is 5 km/h, then find in what time will he be able to cover 8 km upstream?

- (1) 6 h (2) 4 h

(3) 8 h

(4) 5 h

(3) 12 km

(4) 20 km

(5) None of these

(5) None of these

32. A man can row at a speed of 10 km/h in still water to a certain upstream point and back to the starting point in a river which flows at 4 km/h. Find his average speed for total journey.

(1) $9\frac{2}{5}$ km/h

(2) $8\frac{2}{5}$ km/h

(3) $11\frac{2}{5}$ km/h

(4) $5\frac{2}{5}$ km/h

(5) None of these

33. A man can row 6 km/h in still water. If the river is running at 2 km/h, it takes 3 hours more in upstream than to go downstream for the same distance. How far is the place?

(1) 24 km

(2) 28 km

(3) 36 km

(4) 25 km

(5) None of these

34. A boat covers a certain distance downstream in 2 hours but takes 4 hours to return upstream to the starting point. If the speed of the stream be 3 km/h, find the speed of the boat in still water.

(1) 11 km/h

(2) 13 km/h

(3) 9 km/h

(4) 10 km/h

(5) None of these

35. In a river flowing at 2 km/h, a boat travels 32 km upstream and then returns downstream to the starting point. If its speed in still water be 6 km/h, find the total journey time.

(1) 16 hours

(2) 12 hours

(3) 14 hours

(4) 10 hours

(5) None of these

36. A boat travels upstream from B to A and downstream from A to B in 3 hrs. If the speed of the boat in still water is 9 km/h and the speed of the current is 3 km/h, the distance between A and B is

(1) 8 km

(2) 16 km

37. A boat travels 2 km upstream in a stream flowing at 3 km/h and then returns downstream to the starting point in 30 minutes. The speed of the boat in still water is:

(1) 17 km/h

(2) 9 km/h

(3) 13 km/h

(4) 15 km/h

(5) None of these

38. A man swimming in a stream which flows $1\frac{1}{2}$ km/h finds that in a given time he can swim twice as far with the stream as he can against it. At what rate does he swim?

(1) $4\frac{1}{2}$ km/h

(2) $5\frac{1}{2}$ km/h

(3) $7\frac{1}{2}$ km/h

(4) $6\frac{1}{2}$ km/h

(5) None of these

39. A boat travels upstream from B to A and downstream from A to B in 3 hours. If the speed of the boat in still water is 9 km/h and the speed of the current is 3 km/h, the distance between A and B is

(1) 4 km

(2) 6 km

(3) 8 km

(4) 12 km

(5) None of these

40. A man rows upstream 12 km and downstream 28 km taking 5 hours each time. The velocity of water current is

(1) $2\frac{1}{5}$ km/h

(2) $2\frac{1}{2}$ km/h

(3) 3 km/h

(4) $1\frac{3}{5}$ km/h

- (5) None of these
41. Twice the speed downstream is equal to the thrice the speed upstream, the ratio of speed in still water to the speed of the current is
- (1) 1 : 5 (2) 5 : 1
(3) 1 : 3 (4) 2 : 3
(5) None of these
42. A man can swim 3 km/h in still water. If the velocity of the stream be 2 km/h, the time taken by him to swim to a place 10 km upstream and back, is
- (1) 8-h
(2) 9h
(3) 10 h
(4) 12 h
(5) None of these
43. A boat covers 24 km upstream and 36 km downstream in 6 h, while it covers 36 km upstream and 24 km downstream in 6—h. The velocity of the current is
- (1) 1.5 km/h (2) 1 km/h
(3) 2 km/h (4) 2.5 km/h
(5) None of these
44. A boatman goes 2 km against the current of the stream in 1 h and goes 1 km along the current in 10 min. How long will he take to go 5 km in stationary water?
- (1) 1 h (2) 1 h 15 min
(3) 1.5 h (4) 40 min
(5) None of these
45. P, Q R are three towns on a river which flows uniformly. Q is equidistant from P and R. A man rows P to Q and back in 10 h. He can row from P to R in 4 h. The ratio of speed of man in still water to the speed of the current is
- (1) 5 : 3 (2) 3 : 5
(3) 2 : 5 (4) 1 : 2
(5) None of these
46. In a stream running at 2 km/h, a motor boat goes 10 km upstream and back again to the starting point in 55 min. Find the speed of the motorboat in still water.
- (1) 20 km/h (2) 21 km/h
(3) 22 km/h (4) 24 km/h
(5) None of these
47. A man can row 30 km upstream and 44 km downstream in 10 h. Also, he can row 40 km upstream and 55 km downstream in 13 hours. Find the rate of the current and the speed of the man in still water.
- (1) 3 km/h, 8 km/h
(2) 3.5 km/h, 7.5 km/h
(3) 4 km/h, 7 km/h
(4) 4.5 km/h, 6.5 km/h
(5) None of these

ANSWERS

1.	3	9.	1	17.	4	25.	4	33.	2	41.	3
2.	1	10.	4	18.	2	26.	1	34.	2	42.	2
3.	5	11.	4	19.	4	27.	3	35.	3	43.	3
4.	1	12.	2	20.	2	28.	4	36.	3	44.	2
5.	3	13.	4	21.	1	29.	1	37.	1	45.	1
6.	1	14.	5	22.	4	30.	2	38.	2	46.	4
7.	2	15.	5	23.	3	31.	3	39.	2	47.	4
8.	1	16.	3	24.	2	32.	1	40.	1		