

Boat and Stream

1) The speed of a boat when travelling downstream is 32 kmph whereas when travelling upstream it is 28 kmph. What is the speed of the boat in still water?

- ☐ A. 27 kmph ☐ B. 29 kmph ☐ C. 31 kmph ☐ D. None of these

2) If downstream speed of a boat is 16 kmph and its upstream speed is 11 kmph, what is the speed of stream?

- ☐ A. 1.5 kmph ☐ B. 2 kmph ☐ C. 3 kmph ☐ D. 2.5 kmph

3) The speed of a boat along the stream is 8 km/h and against the stream is 6 km/hr. The time taken by the boat to sail 28 km in still water is

- ☐ A. 2 hrs ☐ B. 3 hrs ☐ C. 4 hrs ☐ D. 8 hrs

4) 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?

- ☐ A. 40 minutes ☐ B. 1 hour ☐ C. 1 hr 15 min ☐ D. 1 hr 30 min

5) 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:

- ☐ A. 4.2 km/hr ☐ B. 9 km/hr ☐ C. 13 km/hr ☐ D. 21 km/hr

6) 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:

- ☐ A. 5 kmph ☐ B. 6 kmph ☐ C. 6.5 kmph ☐ D. 7.5 kmph

7) A man can row at a speed of 12 km/hr in still water to a certain upstream point and back to the starting point in a river which flows at 3 km/hr. Find his average speed for total journey.

- ☐ A. $12\frac{3}{4}$ kmph ☐ B. $11\frac{3}{4}$ kmph ☐ C. $12\frac{1}{4}$ kmph ☐ D. $11\frac{1}{4}$ kmph

8) If the ratio of speed of boat in downstream and speed of stream is 9 : 1, speed of current is 3 km per hr, What would be the distance travelled in upstream by the boat in 5 hours?

- ☐ A. 90 km ☐ B. 97 km ☐ C. 115 km ☐ D. 105 km

9) The ratio of the speed of boat in still water to the speed of stream is 16 : 5. A boat goes 16.5 km in 45 minute upstream, find the time taken by boat to cover the distance of 17.5 km downstream.

- ☐ A. 30 minutes ☐ B. 25 minutes ☐ C. 50 minutes ☐ D. 45 minutes

10) 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:

- ☐ A. 1.2 km ☐ B. 1.8 km ☐ C. 2.4 km ☐ D. 3.6 km

11) A man can row 18 kmph in still water. It takes him thrice as long to row up as to row down the river. Find the rate of stream.

- ☐ A. 3 km/hr ☐ B. 6 km/hr ☐ C. 9 km/hr ☐ D. 12 km/hr

12) A man can swim 3 km/hr in still water. If the velocity of the stream is 2 km/hr, the time taken by him to swim to a place 10 km upstream and back is:

- ☐ A. $9\frac{1}{3}$ hr ☐ B. 10 hr ☐ C. 12 hr ☐ D. $8\frac{1}{3}$ hr

13) In stream running at 2 kmph, a motorboat goes 6 km upstream and back again to the starting point in 33 minutes. Find the speed of the motorboat in still water.

- ☐ A. 8 kmph ☐ B. 12 kmph ☐ C. 18 kmph ☐ D. 22 kmph

14) Speed of a boat is 25 km per hour in still water and the speed of the stream is 5 km per hour. If the boat takes 15 hrs to go to a place and come back, the distance of the place is

- ☐ A. 180 km ☐ B. 160 m ☐ C. 164 km ☐ D. 220 km

15) Speed of a boat in still water is 8 kmph and speed of stream is 1.5 kmph. A man rows to a place at a distance of 61.75 km and come back to starting point. The total time taken by him.

- ☐ A. 6 hrs ☐ B. 8 hrs ☐ C. 16 hrs ☐ D. 22 hrs

16) A man rows 8 km/h in still water. If the river is running at 2 km/h, it takes 32 min to row to a place and back. How far is the place?

- ☐ A. 1.5 km ☐ B. 2.5 km ☐ C. 2 km ☐ D. 3 km

17) A motorboat, whose speed in 15 km/hr in still water goes 30 km downstream and comes back in a total of 4 hours 30 minutes. The speed of the stream (in km/hr) is:

- A)4 B)5 C)6 D)10

18) A person can row $7\frac{1}{2}$ km an hour in still water and he finds that it takes him twice as long to row up as to row down the river. The speed of the stream is:

- A)2km/hr B)3 km/hr C) $2\frac{1}{2}$ kmph D) $3\frac{1}{2}$ kmph

19) A boat takes 19 hours for travelling downstream from point A to Point B and coming back to a Point C midway between A and B. If the velocity of the stream is 4 kmph and the speed of the boat in still water is 12 kmph, what is the distance between A and B?

- A)160 km B)152 km C)200 km D)220 km

20) A man can row 6 km/h in still water. If the speed of the current is 2 km/h, it takes 3 hrs more in upstream than in the downstream for the same distance. The distance is

- A)30 km B)24 km C)20 km D)32 km

21) A boat takes 90 minutes less to travel 36 miles downstream than to travel the same distance upstream. If the speed of the boat in still water is 10 mph, the speed of the stream is:

- A)2 mph B)2.5 mph C)3 mph D)4 mph

22) A man can row at a speed of $15\frac{1}{2}$ km/hr in still water. If he takes 4 times as long to row a distance upstream as to row the same distance downstream, then the speed of stream (in km/hr) is

- A)4 B)3.75 C)5 D)4.5

23) Two boats A and B start towards each other from two places, 150 km apart. Speed of the boat A and B in still water are 16 km/hr and 14 km/hr respectively. If A proceeds down and B up the stream, they will meet after.

- A)4.5 hours B)4 hours C)5 hours D)6 hours

24) A man takes twice as long to row a distance against the stream as to row the same distance in favour of the stream. The ratio of the speed of the boat (in still water) and the stream is:

- A)2 : 1 B)3 : 1 C)3 : 2 D)4 : 3

25) 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?

- A) 2 : 1 B)3 : 2 C)8 : 3 D)Cannot be determined E)None of these

26) Amit goes Mumbai to Kolkata by sea route. The speed of the boat in still water is 60 km/h and speed of the current is 15 km/h. After reaching Kolkata he stayed there for 20 minutes and after that come back by same boat. The time taken by him in this journey is 19 hours 32 minutes, find the distance travel by hm in one side.

- A)450 km B)360 km C)540 km D)600 km

27) In a river, the ratio of the speed of the stream and the speed of a boat in still water is 5 : 7. Again, the ratio of the speed of the stream to the speed of another boat in still water is 6 : 8. What is the ratio of the speed of the first boat to that of the second boat in still water?

- A)27 : 29 B)21 : 20 C)27 : 28 D)19 : 17

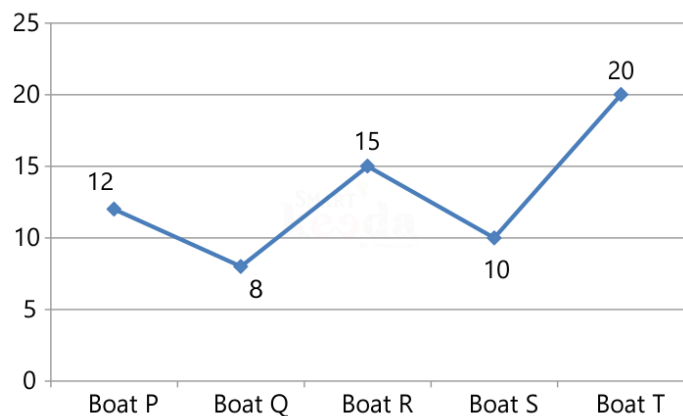
28)A man can row 40 km upstream and 55 km downstream in 13 hours, also he can row 30 km upstream and 44 km downstream in 10 hours. Find the speed of the man in still water and the speed of the current.

- A)8 kmph and 2 kmph B)8 kmph and 3 kmph
C)7 kmph and 5 kmph D)4 kmph and 7 kmph

Direction(29-33): Study the data carefully and answer the question given beside:

The table shows the distance travelled by five different boats upstream and downstream in same time and the line chart shows the speed of stream

Boat	Distance (Upstream)	Distance (Downstream)
P	96	288
Q	120	240
R	100	220
S	150	350
T	180	540



29) Find the ratio of the speed of Boats P and Q together in still water to the speed of Boats S and T together in still water.

- ☐ A 25 : 32
☐ B 27 : 19
☐ C 24 : 39
☐ D 65 : 48
☐ E None of these

30) If the speed of Boat R in still water is increased by 10% and the speed of stream is increased by 20%, Find the time taken by Boat R to cover the distance of 91 km upstream.

- ☐ A 3.5 hours
☐ B 4 hours
☐ C 6 hours
☐ D 2.5 hours
☐ E None of these

31) The distance between point A and point B is 210 km. Boat T travels from point A to B and comes back. What is the time taken by Boat T to cover the total distance?

- ☐ A 10 hrs
☐ B 12.5 hrs
☐ C 14 hrs
☐ D 20 hrs
☐ E 8 hr

32) The ratio of the speeds of the Boat Q to the Boat U in still water is 4 : 5. If the Boat U travels 126 km distance downstream and 81 km distance upstream in 7 hours 30 minutes, What is the speed of stream of Boat U?

- ☐ A 15 km/h
☐ B 10 km/h
☐ C 20 km/h
☐ D 12 km/h
☐ E None of these

33) The speed of Boat Q and S in still water together is approximately how much percentage more than the speed of stream of the same boats together?

- ☐ A 70%
☐ B 120%
☐ C 170%
☐ D 80%
☐ E 270%

34)-36) Each of the questions given below consists of a statement and / or a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statement(s) is / are sufficient to answer the given question. Read the both statements and

Give answer (A) if the data in Statement I alone are sufficient to answer the question, while the data in Statement II alone are not sufficient to answer the question.

Give answer (B) if the data in Statement II alone are sufficient to answer the question, while the data in Statement I alone are not sufficient to answer the question.

Give answer (C) if the data either in Statement I or in Statement II alone are sufficient to answer the question.

Give answer (D) if the data even in both Statements I and II together are not sufficient to answer the question.

Give answer (E) if the data in both Statements I and II together are necessary to answer the question.

34) A boat takes a total time of three hours to travel downstream from P and Q and upstream back from Q to P. What is the speed of the boat in still water?

- I. The speed of the river current is 1 km per hour.
II. The distance between P and Q is 4 km.

35) What is the speed of the boat in still water?

- I. It takes 2 hours to cover the distance between A and B downstream.

II. It takes 4 hours to cover the distance between A and B upstream.

36) What is the speed of the boat in still water?

- I. The boat covers a distance of 48 kms in 6 hours while running upstream.
II. The boat covers the same distance in 4 hours while running downstream.

Q.No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Ans	D	D	C	C	C	C	D	D	B	D	C	C	D	A	C	C	B	C	B	B
Q.No	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36				
Ans	A	D	C	B	C	C	B	B	E	A	C	D	C	E	D	E				