Boat & Stream - Sample Questions

Q 1. It takes a man 6 hours to row a boat 24km upstream and covers a distance of 36 km downstream in 6 hours. What will be the speed of the man in still water?

1. 4.5 km/hr
2. 3.5 km/hr
3. 4 km/hr
4. 5 km/hr
5. 2.5 km/hr

Answer: (4) 5 km/hr

Solution:
Upstream Speed = 24 / 6 = 4 km/hr
Downstream Speed = 36 / 6 = 6 km/hr
Speed of the man in still water = (4+6) / 2 = 10 / 2 = 5 km/hr

Q 2. A boatman can row 2 km against the stream in 20 minutes and return in 10 minutes. What is the rate of flow of current?

1. 2 km/hr
2. 4 km/hr
3. 3 km/hr
4. 3.5 km/hr
5. 4.5 km/hr

Answer: (3) 3 km/hr

Solution:
Downstream Speed = (2/10) × 60 = 12 km/hr
Upstream Speed = (2/20) × 60 = 6 km/hr
Rate of current = (12-6) / 2 = 3 km/hr

Q 3. A man rowing a boat moves 36 km downstream and 18 km upstream. It takes him 6 hours to cover each distance, then what is the velocity (in kmph) of the current?

1. 2.5 km/hr
2. 3 km/hr
3. 1 km/hr
4. 4.25 km/hr
5. 1.5 km/hr

Answer: (5) 1.5 km/hr

Solution:
Downstream Speed = 36/6 = 6 km/hr
Upstream Speed = 18/6 = 3 km/hr
Speed of the current = ½ (6-3) = ½ × 3 = 1.5 km/hr

Q 4. A speedboat goes 7 km upstream in 42 minutes while the speed of the stream is 3 km/hr. What will be the speed of the boat in still water?
1. 12 km/hr
2. 13 km/hr
3. 12.5 km/hr
4. 14 km/hr
5. 26 km/hr

Answer: (2) 13 km/hr

Solution:
Upstream Speed = (7/42) × 60 = 10 km/hr
Speed of the Stream = 3 km/hr
Let the speed in still water by x
Then, upstream Stream,
⇒ x-3 = 10
⇒ x = 13 km/hr

Q 5. The speed of a boat with the current is 15 km/hr and the speed of the current is 2.5 km/hr. What is the speed of the boat against the current?
1. 14 km/hr
2. 12 km/hr
3. 10 km/hr
4. 12.5 km/hr
5. 10.5 km/hr

Answer: (3) 10 km/hr

Solution:
Speed of boat is still water = (15-2.5) = 12.5 km/hr
Speed of the boat against the current = (12.5-2.5) = 10 km/hr

Q 6. A person can swim in water with a speed of 13 km/hr in still water. If the speed of the stream is 4 km/hr, what will be the time taken by the person to go 68 km downstream?
1. 2.5 hours
2. 3 hours
3. 4 hours
4. 3.5 hours

5. 4.5 hours

Answer: (3) 4 hours

Solution:
Downstream Speed = (13+4) km/hr = 17 km/hr
To travel 68 km downstream.
Time taken = 68/17 = 4 hours

Q 7. In one hour, a boat goes 13 km/hr in the direction of the stream and 7 km/hr against the direction of the stream. What will be the speed of the boat in still water?

1. 8 km/hr
2. 10 km/hr
3. 14 km/hr
4. 6 km/hr
5. Cannot Be Determined

Answer: (2) 10 km/hr

Solution:
According to the formula,
Speed of boat in still water = ½ (DownstreamSpeed + UpstreamSpeed)
Speed of boat in still water = ½ (13+7) = ½ × 20 = 10 km/hr

Q 8. A woman can row upstream at 16 km/hr and downstream at 26 km/hr. What is the speed of the stream?

1. 5 km/hr
2. 2 km/hr
3. 4.5 km/hr
4. 21 km/hr
5. 12 km/hr

Answer: (1) 5km/hr

Solution:
According to the formula,
Speed of the stream = ½ (Downstream Speed – Upstream Speed)
Speed of the stream = ½ (26-16) = ½ × 10 = 5 km/hr

Q 9. A speedboat, whose speed in 15 km/hr in still water goes 30 km downstream and comes back in a total of 4 hours 30 minutes. What is the speed of the stream in km/hr?

1. 2.5 km/hr
2. 3.5 km/hr
3. 4 km/hr

4. 5 km/hr
5. 3.25 km/hr

Answer: (4) 5 km/hr

Solution:
Let the speed of the stream be x km/hr
Upstream Speed = 15 + x
Downstream Speed = 15 – x
So, {30 / (15+x)} + {30 / (15-x)} = 4 ½ (4 hours 30 minutes)
⇒ {900 / (225-x2)} = 9/2
⇒ 9x2 = 225
⇒x2 = 25
⇒x = 5

Q 10. A boat is moving 2 km against the current of the stream in 1 hour and moves 1 km in the direction of the current in 10 minutes. How long will it take the boat to go 5 km in stationary water?
1. 1 hr 20 minutes
2. 1 hr 30 minutes
3. 1 hr 15 minutes
4. 30 minutes
5. 45 minutes

Answer: (3) 1 hr 15 minutes

Solution:
Downstream = (1/10 × 60) = 6 km/hr
Upstream = 2 km/hr
Speed in still water = ½ (6+2) = 4 km/hr
So, the time taken by the boat to go 5km in stationary water = 5/4 hrs = 1 ¼ hrs = 1 hr 15 minutes

Given below are a few other Quantitative Aptitude related topics for the reference of candidates:

Number Series	10 Simple Maths Tricks & Shortcuts	Shortcut Tricks for Square, Cube & Multiplication
Tips to Prepare Quantitative Aptitude for Bank Exams	Data Sufficiency	Problems on Ages