









#### Speed Distance and Time Questions - Practice in 5 Minutes

Speed Distance and Time questions are the very popular type of questions in competitive exams. These questions carry a weightage of 2-3 questions (4-6 marks) in SSC exams and 1-2 questions in bank exams. To get a good rank in competitive exams, it is important to be know the distance speed time formula quickly and accurately.

Here are some tips for solving distance speed time questions: Know the formulas and relationships, be careful with units, work with the given information to find the unknown, use a diagram or table to help visualize the problem.

So, we have attached 10 questions of speed distance and time for you to practice with. You should aim to solve these questions in less than half a minute for each.

# **Practice Questions on Speed Distance and Time**

You can also download the Speed Distance and Time questions and answers pdf. Just click on the **Download PDF** button. So let's start with the very first question.

Q:1 Ram travels a certain distance at 3 km/h and reaches 15 minutes late. If he travels at 4 km/h, he reaches 15 minutes earlier. The distance he has to travel is:

- 1. 4.5 km
- 2.6 km
- 3. 7.2 km
- 4. 12 km

(Difficulty: 2, Estimated Time: 20 Seconds) It was very easy, right?

**Q:2** A train running with a speed of 70 km/h can cross another train of length 300 m in 21.6 seconds when running in opposite directions. They can cross each other in 129.6 seconds when running in the same direction. What is the length of 1st train?

- 1. 450 meters
- 2. 420 meters
- 3. 500 meters
- 4. 400 meters

(Difficulty: 4, Estimated Time: 30 Seconds) This was a little bit tough. Did you get it right?

**Q:3** A boat takes 18 hours for traveling downstream from point A to point B and coming back to point C midway between A and B. If the velocity of the stream is 5 km/hr and the speed of the boat in still water is 15 km/hr, what is the distance between A and B?

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1. 180 km

2. 190 km

3. 195 km

4. 200 km

# STUDY CONTENTS THAT GET YOU SELECTED



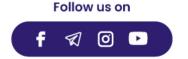






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( <b>Difficulty:</b> 3, <b>Estimated Time:</b> 20 Seconds) This was quite easier than the previous one but not that much easy.
<b>Q:4</b> Rohit and Raman travel the same distance at 14 km/h and 15 km/h respectively. Rohit takes 20 minutes more thar Raman. Find the distance travelled.
<b>1.</b> 90 km
<b>2.</b> 80 km
<b>3.</b> 70 km
<b>4.</b> 60 km
( <b>Difficulty:</b> 2, <b>Estimated Time:</b> 15 Seconds) Have you got al <mark>l your quest</mark> ions correct so far?
<b>Q:5</b> A man takes 3 hours 45 minutes to row a boat 15 km downstream of a river and 2 hours 30 minutes to cover a distance of 5 km upstream. Find the speed of the current.
<b>1.</b> 1 kmph
<b>2.</b> 3 kmph
<b>3.</b> 5 kmph
<b>4.</b> 2 kmph
( <b>Difficulty:</b> 3, <b>Estimated Time:</b> 20 Seconds) We're halfway through. We will increase the difficulty level from now.
<b>Q:6</b> 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.
<b>1.</b> 5 km/hr
<b>2.</b> 8 km/hr
<b>3.</b> 10 km/hr
<b>4.</b> 15 km/hr
(Difficulty: 3, Estimated Time: 20 Seconds) The time is ticking. Hurry up!



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Q:7	A person can rov	w with the stream	at 8 km per hou	r and against th	e stream at 6 km	an hour. The s	speed of the cur	rent
s:								

- 1.1 km/h
- 2. 2 km/h
- 3. 4 km/h
- 4. 5 km/h

(Difficulty: 2, Estimated Time: 15 Seconds) This was a easy one. Right?

**Q:8** A man can row 24 km upstream and 54 km downstream in 6 hours. He can also row 36 km upstream and 48 km downstream in 8 hours. What is the speed of the man in still water?

- 1. 18.75 kmph
- 2. 19.25 kmph
- 3. 17.65 kmph
- 4. 15.55 kmph

(**Difficulty:** 3, **Estimated Time:** 15 Seconds) It is a hard question but I think now you're prepared for it. Did you guess it right?

**Q:9** The speeds of John and Max are 30 km/h and 40 km/h. Initially Max is at a place L and John is at a place M. The distance between L and M is 650 km. John started his journey 3 hours earlier than Max to meet each other. If they meet each other at a place P somewhere between L and M, then the distance between P and M is:

- 1. 220 km
- 2. 250 km
- 3. 330 km
- 4. 320 km

(**Difficulty:** 4, **Estimated Time:** 25 Seconds) It is different type of question. But you'll get these type of questions in the exam too. So, prepare yourself!

**Q:10** If the sum of upstream and downstream speed is 36 km/hr and the speed of the current is 3 km/hr, then find the time taken to cover 52.5 km downstream.

- 1. 2 hr
- **2.** 2.5 hr



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3. 3 hr

4. 3.5 hr

(**Difficulty:** 3, **Estimated Time:** 20 Seconds) Did you guess them all correctly?

# **Answer Key**

Let's check out your score in this test.

1. (2)	<b>2.</b> (2)	<b>3.</b> (1)	<b>4.</b> (3)	<b>5</b> . (1)
<b>6.</b> (2)	<b>7.</b> (1)	<b>8.</b> (2)	9. (4)	<b>10.</b> (2)

Comment below your score, considering each question has 1 mark only. If you scored 8 to 10, congratulations! You are one step closer to selection. If you have scored 5 to 8 marks, then you are doing well, keep it up. If you have scored less than 5 marks then you need to work a little harder on this subject. But don't worry, we are here to help you master the subject.

Let's check the answers and solutions and try to find out what went wrong.

# **Answers and Solutions**

Q:1 The correct answer is option 2 i.e 6 km

Let D be the required distance

So, D/3 - D/4 = (15 + 15)/60

Or, D = 6 km

Q:2 The correct answer is option 2 i.e. 420 meters.

Let the length of the 1st train is 'x' meters and the speed of the 2nd train is 'y' km/h

According to the question:

 $(x + 300) = (70 + y) \times 21.6 \times (5/18)$ 

 $\Rightarrow$  (x + 300) = 6 × (70 + y) ..... (1)

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And,

$$(x + 300) = (70 - y) \times 129.6 \times (5/18)$$

$$\Rightarrow$$
 (x + 300) = 36 × (70 - y) ... (2)

From equation (1) and (2):

$$6 \times (70 + y) = 36 \times (70 - y)$$

$$\Rightarrow$$
 420 + 6y = 2520 - 36y

$$\Rightarrow$$
 42y = 2100

Hence,

Length of 1st train =  $x = 6 \times (70 + 50) - 300 = 420$  meters

## Q:3 The correct answer is Option 1 i.e. 180 km.

If the speed of a boat in still water is u km/hr and the speed of the stream is v km/hr, then

Downstream speed = (u + v) km/hr

Upstream stream = (u - v) km/hr

Downstream speed = (15 + 5) = 20 km/hr

Upstream speed = (15 - 5) = 10 km/hr

Let the distance between A and B be p km, then

$$\Rightarrow$$
 (p/20) + [(p/2)/10] = 18

$$\Rightarrow$$
 (p/20) + (p/20) = 18

 $\Rightarrow$  p = 180 km

#### Q:4 The correct answer is option 3 i.e. 70 km

Given, Rohit's speed = 14 km/h

Raman's speed = 15 km/h



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We know, Time = Distance/Speed

Let the distance be D

According to question

D/14 - D/15 = 20/60

 $\Rightarrow$  (15D - 14D)/210 = 1/3

 $\Rightarrow$  D = 70

∴ Distance = 70 km

Q:5 The correct answer is option 1 i.e. 1 kmph.

Let downstream speed = x

Upstream speed = y

$$\frac{15}{x} = 3\frac{45}{60} \Rightarrow \frac{15}{x} = \frac{15}{4} \Rightarrow x = 4$$

$$\frac{5}{y} = 2\frac{30}{60} \Rightarrow \frac{5}{y} = \frac{5}{2} \Rightarrow y = 2$$

 $\therefore$  Speed of current = (x - y)/2 = 1 kmph



If the speed downstream is p km/hr and the speed upstream is q km/hr, then:

Speed in still water =  $(1/2) \times (p + q)$ 

Let upstream speed = p km/hr

Downstream stream = q km/hr

Then, 40/p + 55/q = 13

and 30/p + 44/q = 10

By solving the above equation, we get

p = 5 km/hr and q = 11 km/hr

 $\Rightarrow$  Speed in still water =  $(1/2) \times (p + q) = 8 \text{ km/hr}$ 

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#### Q:7 The correct answer is option 1 i.e 1 km/h

Let the speed of the current be x km/h and speed of the person in still water be y km/h.

$$\therefore$$
 y + x = 8

$$y - x = 6$$

$$\Rightarrow$$
 y = 7, x = 1

∴ Speed of the current = 1 km/h.

## Q:8 The correct answer is option 2 i.e. 19.25 kmph

Let the speed of man in still water = x

Let speed of stream = y

Then downstream speed = x + y = v

Upstream speed = x - y = u

According to question,

$$\frac{24}{u} + \frac{54}{v} = 6 \dots \dots \dots (1)$$

$$\frac{36}{u} + \frac{48}{v} = 8 \dots \dots (2)$$

eqn (1) 
$$\times$$
 3 - eqn (2)  $\times$  2

$$\frac{72}{u} + \frac{162}{v} = 18$$

$$\frac{72}{u} + \frac{96}{v} = 16$$

$$\frac{66}{v} = 2$$

$$v = 33$$

#### Put in the eqn (1)

$$\frac{24}{u} + \frac{54}{33} = 6$$

$$u = 5.5$$

 $\therefore$  Speed of the man in still water = x = (u + v)/2

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$$= \frac{33+5.5}{2} = \frac{38.5}{2}$$

$$= 19.25 \text{ kmph}$$

Q:9 The correct answer is option 4 i.e. 320 km

Speed of john = 30 km/hr

Speed of max = 40 km/hr

Let distance b/w P and M = x km

$$\frac{650 - x}{30} = \frac{x}{40} + 3$$

7x = 2240

x = 320 km



Let the speed of boat in still water be x km/hr

**ATQ** 

$$x + 3 + x - 3 = 36$$

x = 18

Required time = 
$$\frac{52.5}{21}$$
 = 2.5 hr

So, this is it for today. We will meet again with another new topic. Till then, you can practice the questions again by downloading the PDF of speed distance and time.



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