

Wind and Water Current

A motorboat took 3 hours to make a downstream trip with a current of 6 km/hr. The return trip against the same current took 5 hours. Find the speed of the boat in still water.

An airplane flew for 5 hours with a tail wind of 25 km/hr. The return flight against the same wind took 6 hours. Find the speed of the airplane in still air.

A boat traveled 210 miles downstream and back. The trip downstream took 10 hours. The trip back took 70 hours. What is the speed of the boat in still water? What is the speed of the current?

Len is planning a three-hour trip down the river and back to his starting point. He knows that he can paddle in still water at 3 mi/h and that the rate of the current is 2 mi/h. How much time can he spend going downstream?

A motorboat goes 36 km downstream in the same amount of time it takes to go 24 km upstream. If the current is flowing at 3 km/h, what is the rate of the boat in still water?

SUMMARY

Wind and Water Current Worksheet.

You must do your work on a separate piece of paper.

1. It takes an airplane 1 h 30 min to fly 600 km against the wind. The return trip with the wind takes only 1 h. Find the total flying time for the round trip if there was NO wind.

2. A motorboat has a four-hour supply of gasoline. How far from the marina can it travel if the speed of the boat is 25 mi/h and the speed of the current 5 mi/h and the rate coming back with the current is 30 mi/h?

3. The rate of the current in the river is 4 km/h. If a canoeist can paddle 5 km downstream in the same amount of time that she can paddle 1 km upstream, how fast can she paddle in still water?

4. An airplane whose speed in still air is 760 km/h can travel 2000 km with the wind in the same amount of time that it takes to fly 1800 km against the wind. What is the speed of the wind?

1. 2.4 h

3. 48 mi

3. 6 km/h

4. 40 km/h