

Add & Subtract with Hudson River Shipping

On October 6, 2004, students recorded information about **vessels** they saw on the river. Use this table of their observations to answer the questions below.

		Vessels: Time Seen/Direction of Travel			
		<i>Gypsum Baron</i>	<i>Bouchard B#35</i>	<i>Alice Oldendorff</i>	<i>RTC 120</i>
Hudson River Miles/Town	HRM 124/Stuyvesant		11:30 AM/south	1:02 PM/south	
	HRM 115/Athens			1:35 PM/south	9:00 AM/south
	HRM 97/Ulster				10:30 AM/south
	HRM 87/Esopus				11:17 AM/south
	HRM 61/Beacon		4:45 PM/south		
	HRM 18/Yonkers	9:45 AM/south			
	HRM 7/Manhattan	10:45 AM/anchored			



The Alice Oldendorff passes Stuyvesant (photo by Doug Reed)

1. The ship *Alice Oldendorff*, 633 feet long, carries road salt and **gypsum**.

(a) How long did the *Alice Oldendorff* take to go from Stuyvesant to Athens?

(b) How many miles did the *Alice Oldendorff* travel between those two points?

_____ miles

2. The *Gypsum Baron*, 495 feet long, carries gypsum to **wallboard factories** on the Hudson at Haverstraw, Buchanan, and Rensselaer.

(a) How many miles did *Gypsum Baron* travel from Yonkers south to Manhattan?
_____ miles

(b) How long did it take *Gypsum Baron* to make the trip?

(c) Using your answers from (a) and (b), how fast was the *Gypsum Baron* going in miles per hour? _____ miles per hour



A tugboat pushes the RTC 120 past Poughkeepsie. The barge is empty, so it floats high in the water.

3. The tanker **barge** *RTC 120*, 405 feet long, carries oil. Tugboats push or pull the barge through the water.

(a) How long (in hours and minutes) did it take *RTC 120* to go from Athens to Ulster? _____

(b) How long did it take *RTC 120* to go from Ulster to Esopus? _____

(c) How many miles did *RTC 120* travel between Athens and Esopus?
_____ miles

4. The tanker barge *Bouchard B#35*, 338 feet long, also carries oil.

(a) A football field is 300 feet long from one goal line to the other. Is the *Bouchard B#35* longer than a football field? ____no ____yes
How much longer? _____ feet

(b) How long did it take *Bouchard B#35* to go from Stuyvesant to Beacon?

(c) How many miles did *Bouchard B#35* travel between the two places?
_____ miles



A tugboat brings a tanker barge to an oil tank farm in Troy. Since the barge is loaded with oil, it floats low in the water.