

## Worksheet: Doing Math 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.

Hudson River Mile town or city	HRM 124 Stuyvesant	HRM 115 Athens	HRM 97 Ulster	HRM 87 Esopus	HRM 61 Beacon	HRM 18 Yonkers	HRM 7 Manhattan
ship <i>Gypsum Baron</i>						9:45 AM south	10:45 AM anchored
ship <i>Alice Oldendorff</i>	1:02 PM south	1:35 PM south					
barge <i>Bouchard B#35</i>	11:30 AM south				4:45 PM south		
barge <i>RTC 120</i>		9:00 AM south	10:30 AM south	11:17 AM south			

**1. 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 to Manhattan?
- (b) How long did it take *Gypsum Baron* to make the trip?
- (c) How fast was the *Gypsum Baron* going (in miles per hour)?

**2. A tugboat propels the oil barge *RTC 120*, 405 feet long, through the water.**

- (a) How many miles did *RTC 120* travel between Athens and Esopus?
- (b) How long (in minutes) did this trip take?
- (c) What was *RTC 120's* speed in miles per minute (round to the nearest tenth)?
- (d) How fast was the *RTC 120* going in miles per hour?



3. The 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? How much longer?

(b) How many miles did the *Bouchard B#35* travel from Stuyvesant to Beacon?

(c) How many minutes did its trip from Stuyvesant to Beacon take?

(d) What was the *Bouchard B#35's* speed in miles per hour?



The *Alice Oldendorff* passes Stuyvesant (photo by Doug Reed)

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

(a) How many miles did the *Alice Oldendorff* travel from Stuyvesant to Athens?

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

(c) What was the ship's speed in miles per minute (round to nearest tenth) and miles per hour?

(d) At that speed, how long would the *Oldendorff* take to travel between HRM 115 and HRM 7?

(e) At what time would the ship arrive at HRM 7?

