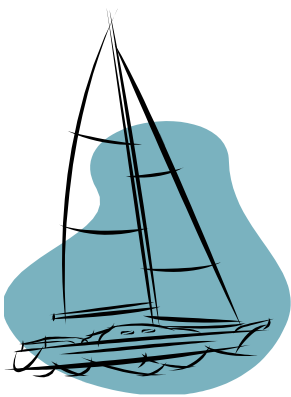


Almost without knowing, we use **MATH** in so many ways in our daily lives. We use it to **FIGURE** out if we have enough money to pay for things at the store or to **DECIDE** what time we have to leave home to get to soccer practice on time. Onboard Bodacious Dream, we use math to keep **TRACK** of where we are, where we're headed, and when we'll get there. And, we use it to **CALCULATE** if we have enough food, cookies, and water onboard. All these things are important to help us travel safely from one harbor to another.

The Bodacious Dream crew needs your help to navigate from one place to another. Come onboard!



The sail boat Bodacious Dream will travel thru the water at 7 miles per hour. We want to travel non-stop to New York City, which is 642 miles north of where we'll begin the race in Charleston, South Carolina. Here are the questions we have to ask before we leave. Can you help us find the answers?

How many **HOURS** will it take us to get to New York City?

$$\underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ hours}$$

How many **DAYS** will that be?

$$\underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ days}$$



If we leave at **2:00** in the afternoon on **Saturday, May 11th** when will we arrive in New York City?

What **DAY** will we arrive? _____

What **TIME** will we arrive? _____ a.m. or p.m.?



We plan to leave New York City on **Saturday, May 18th** at 2:00 p.m. The trip to Newport, Rhode Island is 231 miles. Remember we are sailing at 7 miles per hour. When will we get to Newport?

What **DAY** will we arrive? _____

What **TIME** will we arrive? _____ a.m. or p.m.?

How **LONG** did it actually take us and how **FAST** did we sail?

| Leg | Miles | Hours | Miles per Hour |
|------------------------|--------|-------|----------------|
| Charleston to New York | \div | $=$ | |
| New York to Newport | \div | $=$ | |

The Atlantic Cup has **TWO** offshore legs — Charleston to New York and New York to Newport — and several inshore races — in Newport.

How many miles will Bodacious Dream race **OFFSHORE**? _____ + _____ = _____ miles

How many **DAYS** will we be offshore? _____ + _____ = _____ days



And now, for the most **IMPORTANT** calculation of the trip: We know Dave likes Chocolate Chip cookies because he's allergic to peanuts. Dave only eats two cookies a day so he won't gain weight. How many **COOKIES** will Dave need to have onboard for the trip? _____

If there are 28 cookies in a package, **AND** Dave was nice enough to share them with Matt, how many cookies could they each eat every day if they had one package onboard? _____

This time there will be just two crewmembers during the two offshore races. We will work in 4 hour shifts we call "watches." How many **WATCHES** are there in a **DAY**?

_____ ÷ _____ = _____ watches

If watches start when we leave Charleston at 2:00 in the afternoon, tell us what **TIME** each watch will begin.



| Watch | Start Time |
|-------|------------|
| 1 | 2:00 p.m. |
| | |
| | |
| | |
| | |
| | |
| | |

BONUS

A **KNOT** is a nautical mile figured out to 6000 feet to work with the latitude and longitude system of navigation.

A **STATUTE MILE** is 5280 feet and is used to measure distance on land.

How many miles per hour is 7 knots of boat speed? _____

How many offshore miles will we sail (distances are in nautical miles)? _____

How many miles would that be by car? _____