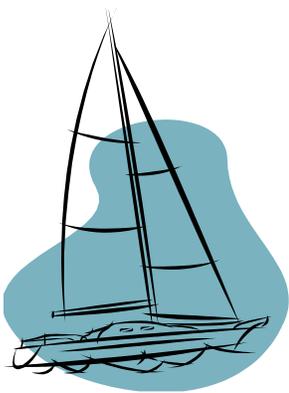


Almost without knowing, we use **MATH** in so many ways in our daily lives. We use it to **FIGURE** out if we have enough money to pay for things at the store or to **DECIDE** what time we have to leave home to get to soccer practice on time. Onboard Bodacious IV, we use math to keep **TRACK** of where 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 IV crew needs your help to navigate from one place to another. Come onboard!**



The TransPac race is a long one — nearly 2250 miles! The sailboat Bodacious IV travels thru the water at an average of 8 knots (nautical miles per hour). But, we want to arrive in Hawaii in 10 days. Here are the questions we have to ask before we leave. Can you help us find the answers?

How many **MILES** will we have to travel each day to arrive in 10 days?

\_\_\_\_\_ ÷ \_\_\_\_\_ = \_\_\_\_\_ miles

How many **MILES PER HOUR** will we have to sail?

\_\_\_\_\_ ÷ \_\_\_\_\_ = \_\_\_\_\_ MPH

Los Angeles and Honolulu are in different **TIME ZONES**. Can you name them? When we start the race at 1:00pm in Los Angeles, what **TIME** will it be in Honolulu?

City	Time Zone	Time
Los Angeles		1:00pm
Honolulu		



If we leave Los Angeles on **Thursday, July 11<sup>th</sup>**, what **DAY** will we arrive in Hawaii (remember, we want to be there in 10 days)? \_\_\_\_\_

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

Leg	Miles	Hours	Miles per Hour
Los Angeles to Honolulu	÷	=	



How **DEEP** is the Mariana Trench? \_\_\_\_\_

If a typical two-story house is 25 feet tall, how many **HOUSES** could you stack on top of one another to fill the **TRENCH**? \_\_\_\_\_

That's a **LOT** of houses—maybe a town full of houses!

Bodacious IV started her journey west in Chicago. How many **MILES** is it from Chicago to Los Angeles? How many **MILES** is it from Los Angeles to Hawaii? Which distance is **FARTHER** and by how much?

City	Miles
Chicago to Los Angeles	
Los Angeles to Honolulu	
Difference	



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 give two cookies each day to each of his eight crewmates, how many packages of cookies would he have to have onboard? \_\_\_\_\_



**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 8 knots of boat speed? \_\_\_\_\_

How many nautical miles will we sail at 8 knots? \_\_\_\_\_

How many statute miles would that be by car? \_\_\_\_\_