

## Using the Weems & Plath Nautical Slide Rule

The Nautical Slide Rule consists of two circular dials mounted on a plastic base. Always set the distance first when it is one of the known factors. Due to the fact that the speed scale is read through both dials, this setting should always be made last when speed is one of the known factors.

The time scale gives hours in green figures and minutes and seconds in black figures. Seconds are listed only to 120 and cannot be used as minutes and seconds, but only as total seconds for timed runs of less than two minutes. Likewise, the separate hour scale and minute scale are not combined as hours and minutes but used only as hours and fractions of an hour, or as total minutes. To illustrate, set the time line on 1.5 minutes and note that it is also on 90 seconds. Either unit may be used. Now set the time line on 150 minutes and note that it also reads 2.5 hours.

The speed scale reads from 1 to 100 knots or mph.

The distance scales are given in nautical miles (green figures) or yards (black figures). For example, set 3 nautical miles on the distance line and note that this can also be called 6,000 yards depending on which unit you are using for distance.

The green distance figures may also be used as statute miles, but in this case your speed will be in statute miles per hour instead of knots. **WHEN USING STATUTE MILES THE YARD SCALES MUST NOT BE USED.**

### EXAMPLES

**Example #1** To find speed when time and distance are known. Assume that you have run a distance of 12 miles as measured on your chart between buoys and that it took you 80 minutes to cover this distance. First turn the outer dial until 12 miles is on the DISTANCE line, then turn the inner dial until 80 minutes is under the TIME line. Now read your speed as 9 knots.

**Example #2** In this type of problem you know that for a given run your yacht will make a good speed of 15 knots and you desire to know how far you have traveled in 2-1/2 hours (150 minutes). Turn the inner dial until the time line is over 2.5 hours then turn the two dials together until 15 is opposite the speed marker. Now read your distance of 37-1/2 miles at the distance line.

**Example #3** To find the length of time it will take to go a given distance at a known speed. For this type of problem assume that you desire to make a trip of 30 miles and the speed of your boat is 19 knots. First set the outer dial so that the distance line is on 30 miles. Hold this setting in place with your thumb and turn the inner dial to a speed of 19 knots and read off your time of 95 minutes for the trip.

# Weems & Plath®

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