Set & Drift

Step 1: DR, Fix, CMG, SMG
Set & Drift
Step 2: Find New Course To Steer

1. Erase Course from DR to Destination
2. Draw Course from most recent fix to destination
   This is the course you need to make good.
3. Pick a time interval for your new set & drift triangle (say 30 min.)
4. Draw the set & drift you expect to encounter over this time period.
5. Setting your dividers on the distance you will travel in the time chosen for your triangle, swing an arc from the end of the set & drift vector to intersect your course to make good.
6. The direction of this line is your course to steer.
7. Your vessel will actually track along the line from the fix to the destination, and the length of this side of the triangle will represent your speed made good, remembering to convert it to a run of a whole hour.
Once more, with numbers
First, print this chart out.
You can plot on it to follow along.
Once more, with numbers

1. From a fix, draw your course to the destination
2. Plot a DR for some future time (we’ll use 1230, or 1/2 hour)
3. Get a fix at 1230, and plot the course you have made good. This is 079°
4. Calculate your speed made good. This is 12.2 miles, \textit{in 1/2 hour}, thus 24.4 knots
5. Calculate the set you experienced. This is 126°
6. Calculate the drift you experienced. This is 3.5 miles \textit{in 1/2 hour}, or 7 knots

Return to Chapter 8
Once more, with numbers, cont.

7. From the 1230 fix, draw your new course to the destination, but first erase the old course line, as it is no longer valid. The new course line is the course you need to make good.

8. Draw the set & drift vector that will affect you for the duration of the triangle you will draw (in this case, 1/2 hour).

9. With your dividers set on the distance you will run in 1/2 hour (the duration of this triangle), swing an arc to intersect the new course to make good, and draw a line from the end of the set & drift vector to that point. The length of this line is determined by using your speed by revolutions, and the time of the triangle, or 20 kts. x 1/2 hour = 10 miles.
10. The direction of this line is the course to steer

11. To find the speed you will make good on this leg, measure the distance from your 1230 fix to the intersection of the course to steer line. This is the distance you will run in the time interval of the triangle (1/2 hour).

12. Convert this to speed using the speed/time/distance formula.