



These are True Wind / Boat Speed / Apparent Wind Triangles at 45 degrees true wind

VMG 2.7 kts

(X) = X knots of true wind

How to read:
 e.g. at 8 knots of true wind speed (8) (red line curved line) with the boat headed at 45 degrees off the true wind, the boat speed is marked by the black dot at 3.8 knots. A horizontal line shows the boats VMG as 2.7 knots. The red triangle shows the wind wind angle where the true wind is 8 knots, the apparent wind is 11 knots at 30 degrees off from the boat heading.

The diagram also shows that for an increase in true wind speed (except for a large gust) the apparent wind direction does not change. However, until the boat speed increases to match the polar speed, there will be a temporary lift.