Table for Estimating Race Duration

Boats moving at approx. 2 kts are covering approx. 1 mile in **30** minutes
At 4 kts , I mile takes approx **15** minutes and at 6 kts, 1 mile takes approx **10** minutes.
As this is meant to be a quick means of calculation, "approx." is good enough!

		Minutes needed to complete leg (x2 if Windward leg)		
Leg	**Naut Miles**	**at 2 knots**	**At 4 knots**	**at 6 knots**
1 - 2	0.3	9 (18)	5 (9)	3 (6)
1 - 3	0.7	21 (42)	11 (22)	7 (14)
1 - 4	1.1	33 (66)	17 (33)	11 (22)
1 - 5	1.3	39 (80)	19.5 (39)	13 (36)
1 - 6	0.7	21 (42)	11 (21)	7 (14)
2 - 3	0.5	15 (30)	7.5 (15)	5 (10)
2 - 4	0.9	27 (54)	13.5 (27)	9 (18)
2 - 5	1.3	39 (80)	19.5 (39)	13 (36)
2 - 6	0.7	21 (42)	11 (22)	7 (14)
3 - 4	0.5	15 (30)	7.5 (15)	5 (10)
3 - 5	1.0	30 (60)	15 (30)	10 (20)
3 - 6	0.6	18 (36)	9 (18)	6 (12)
4 - 5	0.6	18 (36)	9 (18)	6 (12)
4 - 6	0.5	15 (30)	7.5 (15)	5 (10)
5 - 6	0.6	18 (36)	9 (18)	6 (12)

NOTE: **'A' Fleets** w/ Spinnakers prefer Windward / Leeward courses.
'B' & 'C' Fleets w/o Spinnakers prefer Windward / Reaching / Leeward Marks.

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Determine wind direction. Choose two marks that lie along this direction. Position Committee Boat along this Line. This will be your Windward/Leeward Leg for the 'A'Fleet.

Determine which Mark lies to Port of this line. That will be the Reaching Mark for the 'B' & 'C' Fleets.

Determine approx. boat speeds. Call "moving" 2 knots, "comfortable" 4 knots and "Whoopee!" 6 Knots

Add minutes needed for each leg as shown in the table.

Example; The wind is blowing from #6 to #3. This suggests a 6 - 3 Course for the 'A' Fleet and a 6 - 2 -3 course for the 'B' & 'C' Fleets. Depending on wind speed, this windward leg will take from 12- 36 minutes. (Of course this will not apply to all boats, but will reveal a usable average.)

Use total minutes needed for each lap to decide how many laps will be needed for a 75 minute race.

(This allows for 2 Hour Limit under the Rules, while long enough for "Fun Factor".)

The margin of error will probably result in a race of no less than one hour or more than 90 minutes. It is better to err on the side of too long. It is easier to shorten a course if the wind dies, impossible to add length if it increases.

In this case, a Course Board *might* look like this;

A Fleet **6-3 x 3** (27 minutes per lap, x 3 = 81 minutes at 4 kts)
B Fleet **6-2-3 x 2** (40 minutes per lap, x 2 = 80 minutes at 4 kts)
C Fleet **6-2-3-6-3** (55 minutes for race… for slowest fleet)

If these figures are off by 25% it would still mean a shortest race of 60 minutes for the faster boats and 40 minutes for the slowest, and in the other direction, a max of 100 minutes for the faster boats and 70 minutes for the slowest. This allows for most breeze variations and rough numbers used in calculations. TRY IT,… AND RECORD IT!