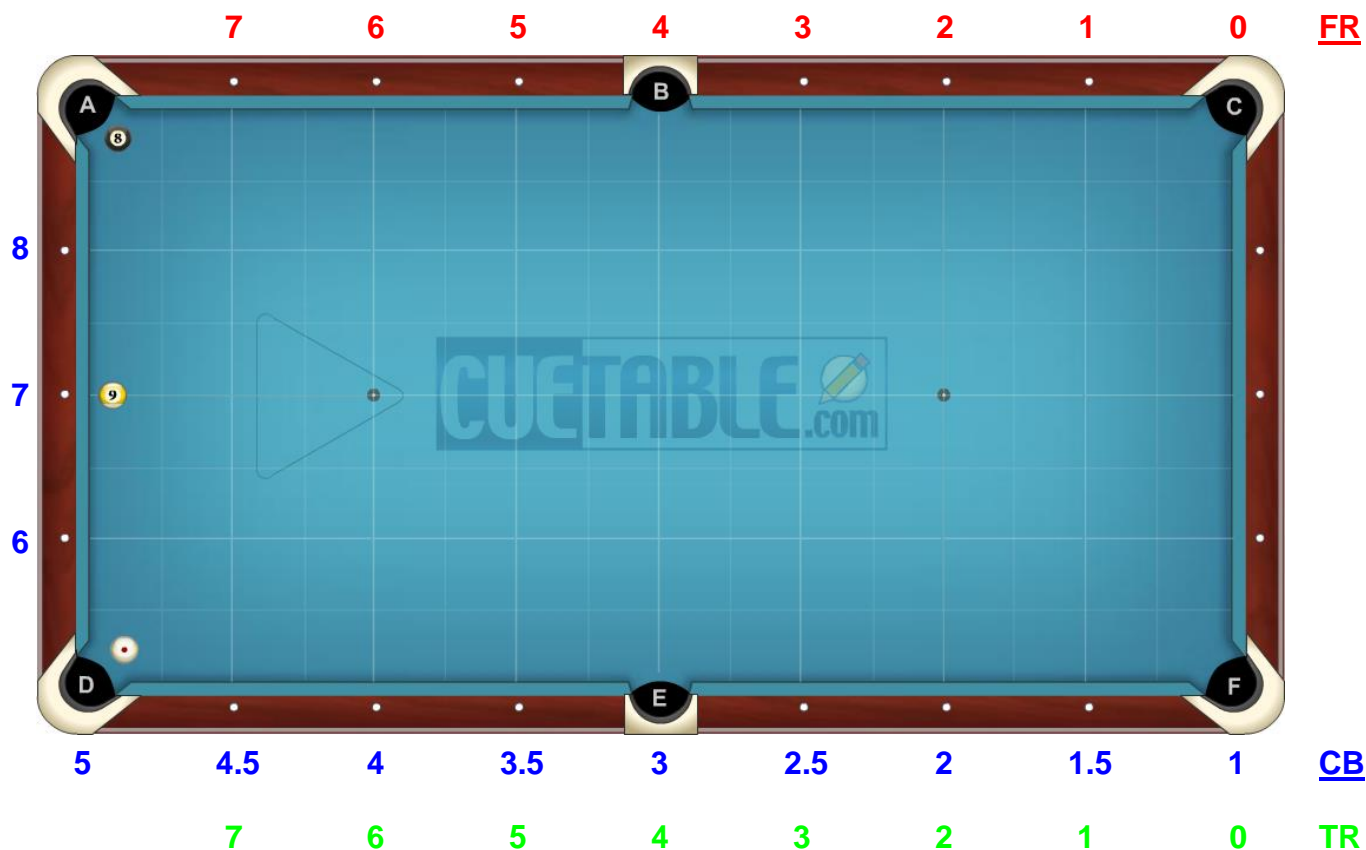


“THE” Diamond System – Corner Five – Part 1

This article begins my coverage of what most people know as “the” diamond system, the Corner Five three rail system. This system has been covered in many books, videos, articles, and even in a Disney short cartoon (Donald Duck in Mathmagic Land). Quite a few books, especially some of the older ones from Hoppe and the like, are criticized for being incorrect or incomplete. Others offer only basic information, which isn’t very useful except for specific shots. Yet others try to come up with their own version of the system, sometimes complicating the math and memorization part of it far more than necessary.

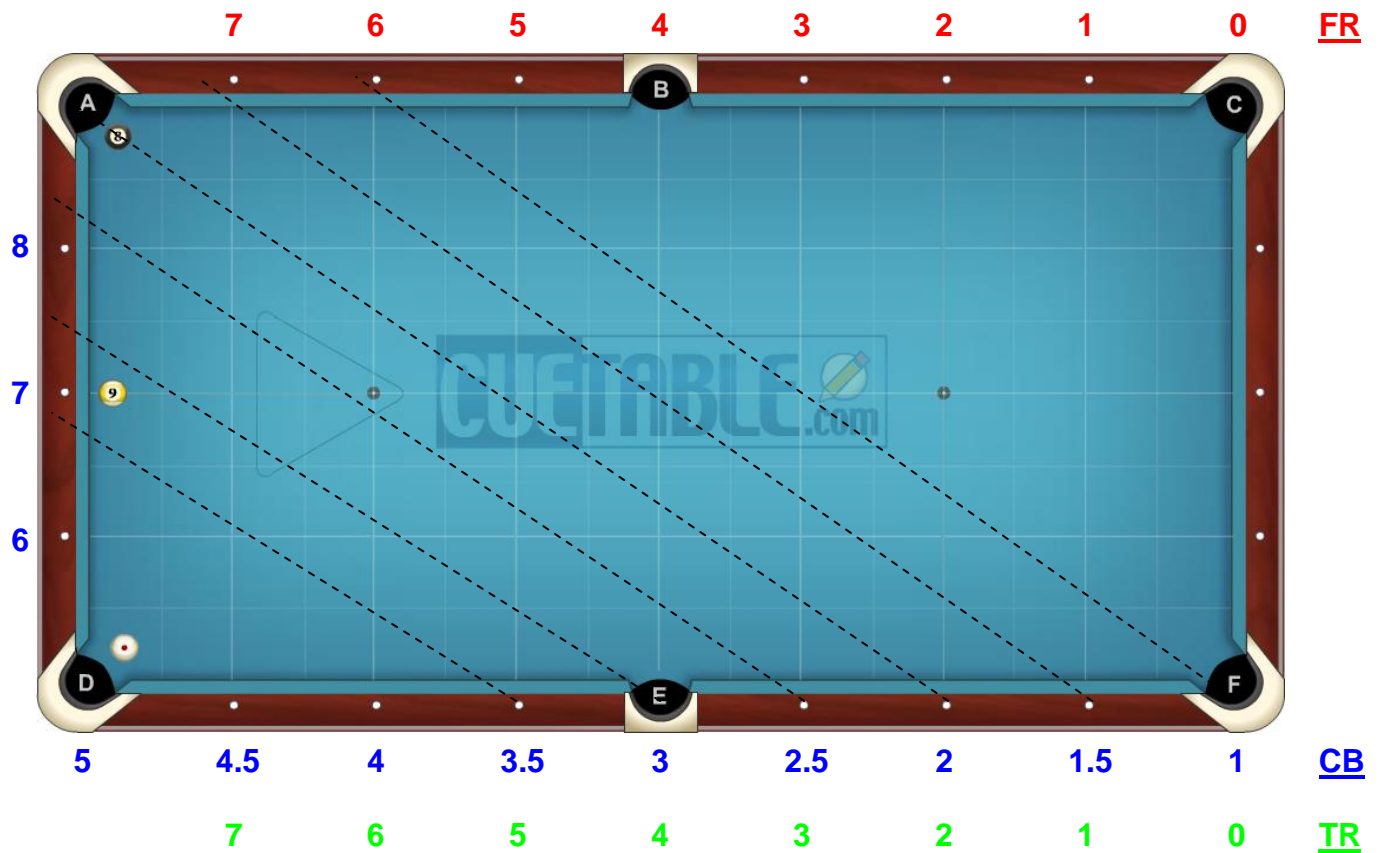
I first learned this system from Robert Byrne’s Standard Book of Pool and Billiards. My copy is so worn out from my early days of playing that the pages are completely separated from the binding... Not only did I learn a lot about pool from this book – his writing style and comprehensive treatment of various techniques and shots made this my number one source for information at the time – but the second half of his books are all about three cushion billiards. So years later, when I began to play three cushion, I had several great books already at my disposal! I still feel that his treatment and explanation of the Corner Five system is one of the simplest yet most complete I’ve seen, and it certainly was the foundation for my own experimentation with the system in both billiards and pool. I had to learn to adapt this system to the pool table, since the rails and cloth are different than a three cushion table and the cue ball reacts differently, but the system is easily adapted and works really well for both.



You really need to know three things to make this system work – the system numbers, the system tracks, and the calculation itself. Don't worry, it's not that bad, and with a little practice you can figure out the correct line and aim point in a matter of seconds.

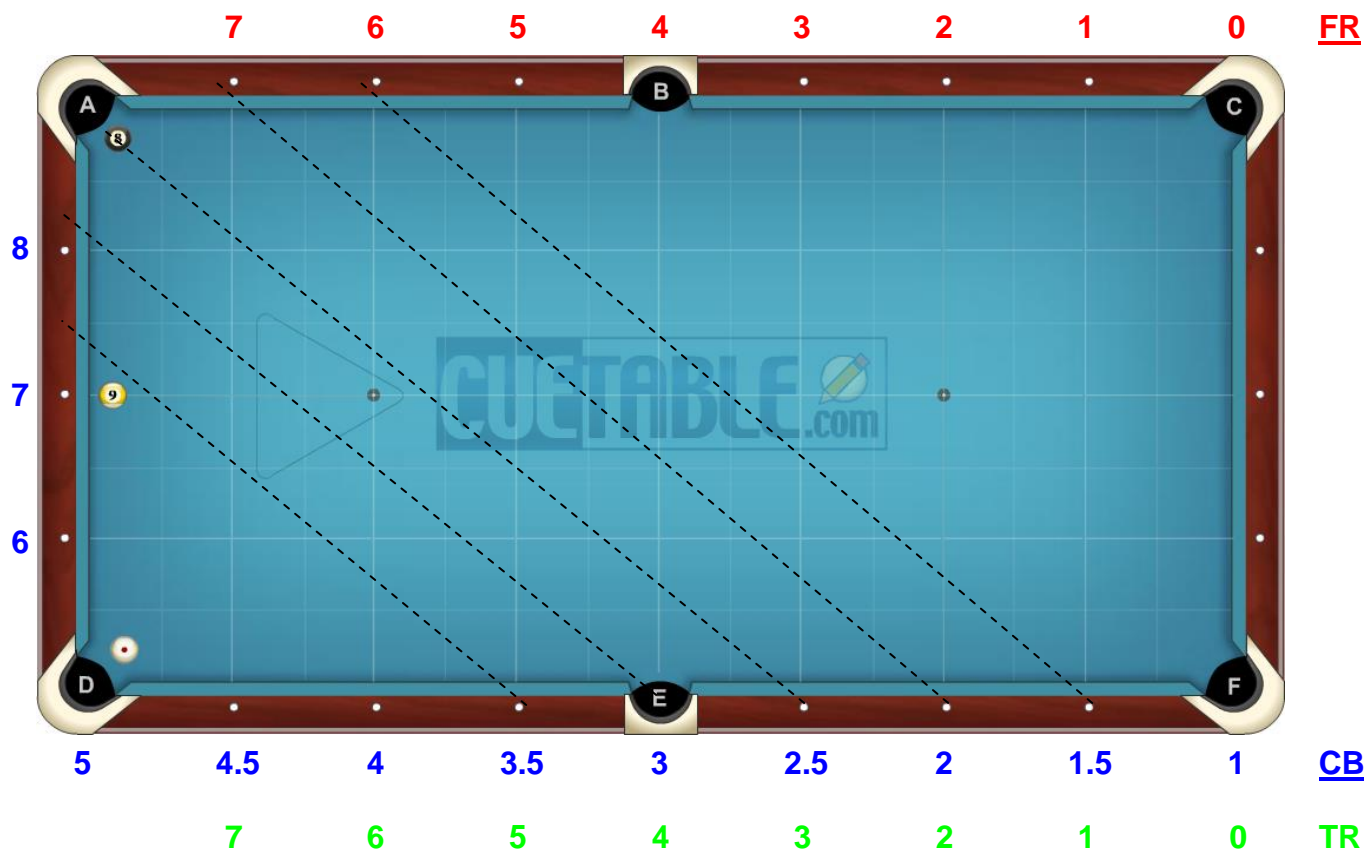
I'll start with the system numbers. There are three sets of numbers, two of which are the same. First we have the cue ball numbers, highlighted in blue above. In this example the cue ball is originating out of the corner, which happens to be diamond 5 for this system (hence the name "Corner 5"). As you can see, the cue ball numbers start at 1 in the top corner and increase by $\frac{1}{2}$ for each diamond on the long rail, as you turn the corner down the short rail they increase by a full number. Next you have the first rail aim numbers, which are highlighted in red, starting at 0 in the far corner and increasing one number for each diamond, so pretty simple to remember. Last are the third rail hit numbers, highlighted in green and numbered the same as the first rail numbers.

Some people find it easier to multiply all of these diamond numbers by 10 – so the cue ball numbers start at 10 then 15, 20, 25, and so on, and the first rail/third rail numbers start at 10, 20, 30, etc. The formula for this system is relatively simple, but some people have an easier time working with whole numbers instead of decimals or fractions. If that's you, then by all means multiply all of the numbers above by 10 and work with the system that way. I'll continue to use the numbers as diagrammed above since that's how I learned the system and I'm not fractionally challenged... 😊



Next we have the system tracks. These track numbers show the path the cue ball will take coming off the third rail and heading to the fourth rail.

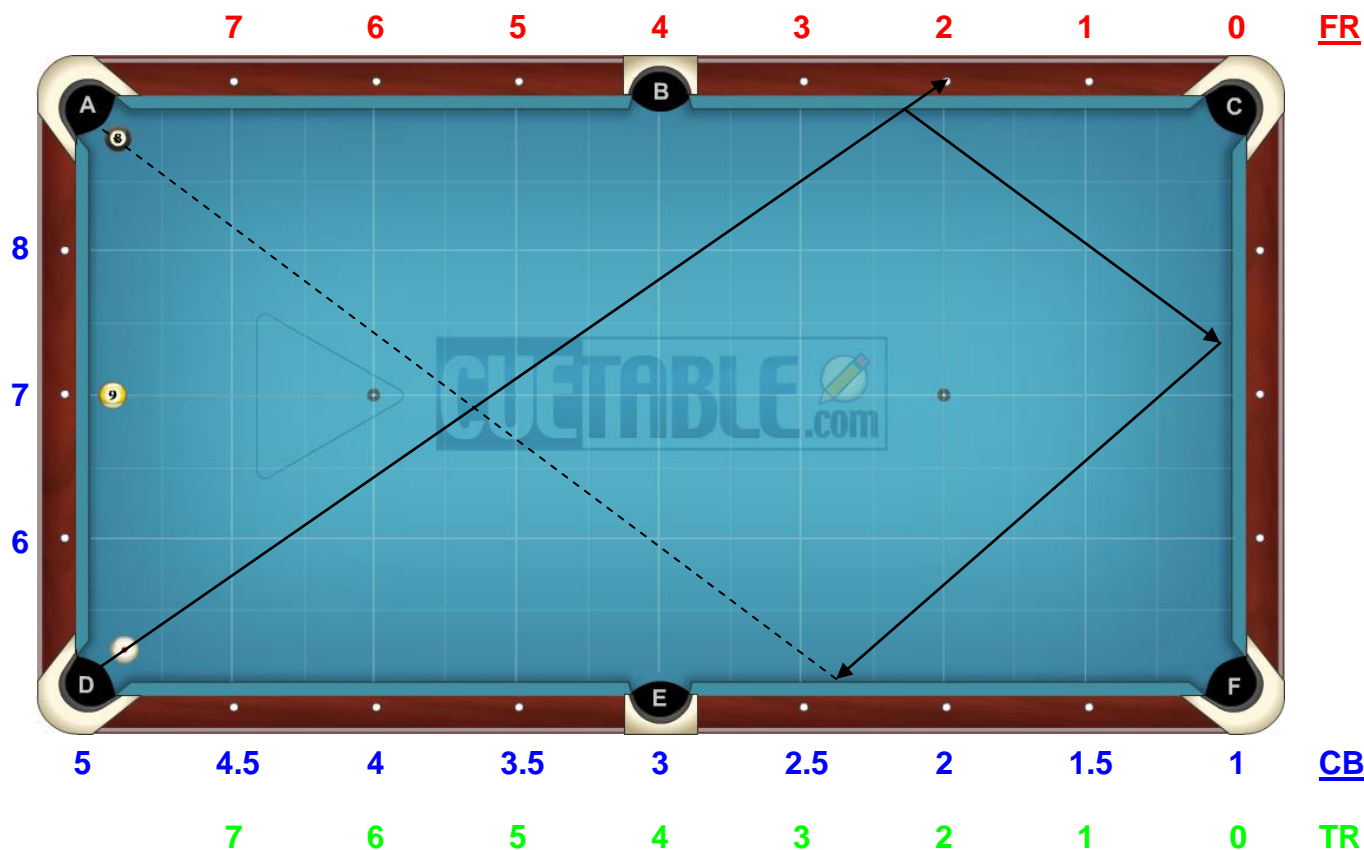
First I wanted to show the standard 3 cushion tracks above, even though most people reading this will want to apply this to a pool table and can skip to the next diagram for further study. But this is how I learned the system and is still what I use for standard track lines. From these reference lines I just apply certain adjustments for the pool table I'm playing on to end up in the same place, but more on this later.



These are the standard tracks you will find on a pool table and the ones you should memorize if using this mostly on a pool table.

It is necessary to know the tracks to make the system work for anything beyond the third rail, as you will need to see what track your object ball is on or what track corresponds to the point on the fourth rail you are trying to hit. These tracks will vary from table to table somewhat, but the way my adjustments work it won't matter that much. Just remember that track 3 (third rail or "green" numbers) goes to the corner on a typical pool table, and that's the most important one. Track 2 goes to just below the first diamond above the pocket, and Track 1 ends up close to two diamonds from the corner pocket. Tracks 4 and 5 travel as shown, just about $\frac{3}{4}$ diamond away from the corner pocket for track 4 and then another $\frac{3}{4}$ diamond away for track 5.

Again, with a little memorization and practice these will be second nature. If I know track 3 goes to the corner and I know approximately how much the other tracks vary, it's pretty easy to estimate even if you forget the exact tracks. Next we'll put all of this together using the diagrammed example.



Finally, the long awaited calculation. It's simple subtraction: $CB - TR = FR$, or Cue Ball number (CB) minus the Third Rail number (TR) equals the First Rail aim point (FR).

Using the example above, we want to kick at the 8 ball three rails (yes, I know you can kick one rail, jump, masse, etc., but bear with me...). We know that track 3 goes to the corner, so that's our third rail (TR) number. We know the cue ball is coming out of the corner at 5, so that's our CB number. So using the simple formula, $CB - TR = FR$ we get $5 - 3 = 2$. So if we aim through diamond two (all of these calculations will be through the diamonds, not at the point opposite on the cushion) with medium speed and running english we should pocket the 8 ball and have shape on the 9 ball as well.

For anyone using this on a 3 cushion table, just remember that track 2 typically goes to the corner, so in that case you would want to calculate this as $5 - 2 = 3$, giving you a first rail aim point of 3 instead of 2. The system works similarly on either table, you just have to know the differences in the tracks and how the table reacts differently to speed and spin to estimate your shots more accurately. For the remainder of this and future articles all examples will reference this system on a pool table, for you 3 cushion enthusiasts just remember the concepts covered can be readily applied there as well.

So in a nutshell this is the Corner Five system. This is also where a lot of published information stops, other than perhaps giving another example or two. So let this information sink in, get comfortable with the calculations and the rail and track numbers, and I'll continue in the next article by discussing how to estimate cue ball positions when they are not near the rail, how to make adjustments on your particular table (for both third and fourth rail targets), and how to adjust for shots in various positions on the table.