



MAKE PEACE, NOT WAR

The 30-Degree Rule can help you avoid obstacles and scratches and open clusters.

“DR. DAVE” ALCIATORE

FYOU don't know about the 30-degree rule, learning it can truly transform your game. Like the 90-degree rule — which predicts that a cue ball with stun (i.e., no top or bottom spin) will continue at a 90-degree angle from the object ball's direction — this principle helps you predict the path of a cue ball. Knowledge of the 30-degree rule will help immensely when you're planning to avoid obstacles, break open clusters, avoid scratches and plan carom and billiard shots.

The 30-degree rule states: **When the cue ball hits an object ball with normal roll close to a half-ball hit, the cue ball will deflect approximately 30 degrees away from its initial aiming line (as shown in Diagram 1).**

You might be asking yourself: How often am I going to be aiming to contact exactly half of the object ball? Well, luckily, the half-ball hit is just the center of a large range of possible contact points on the object ball. The 30-degree rule is applicable for all hits on the object ball between one quarter and three-quarters.

To be able to apply the 30-degree rule, you need to visualize an appropriate angle along which the cue ball will roll. For this, I've developed Dr. Dave's Peace Sign Technique. For most people, if you form a relaxed but firm “V” shape with your index finger and middle fingers (a “peace” or “victory” sign), the angle between your extended fingers will be very close to 30 degrees, as you can see in Diagram 2. If you point one of your fingers along the aiming line, the other finger will indicate the direction of the cue ball after impact. Just be sure to align the angle vertex point

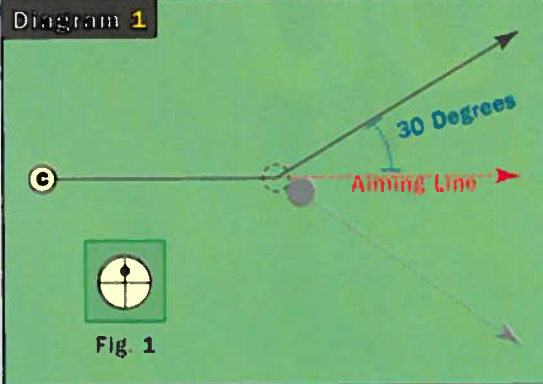


Fig. 1

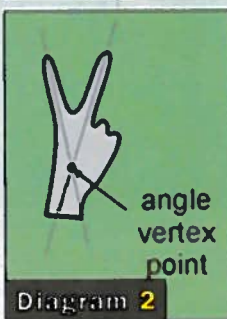


Diagram 2

(where the lines of the two fingers meet) with the center of the ghost ball (the dotted-line ball in Diagram 1).

Now, let's take a quick look at some in-game uses for this rule.

Avoid Obstacles: The 8-ball layout in Diagram 3 is a perfect example. You want to play position from the 1 to the 6 ball, going off the short rail. With natural roll, the cue ball will deflect to the left. With your peace sign, you know the cue ball will avoid the cluster of stripes, so you'll be in good shape to run out for the win.

Open Clusters: On the flip side, sometimes you need to open up a cluster. In this case, you want to drive the cue ball into an object ball(s), so identify possible shots that allow for a 30-degree deflection into the intended target.

Avoid Scratches: Just as you would use this technique to avoid running into balls unnecessarily, you can quickly identify when your flirting with a scratch. Having a more exact understanding of the cue ball's path after contact will let you know whether you are safe — or if it's time to choose a different shot.

Carom Shots: Both the 30-degree and 90-degree rules can be used to measure carom shots, where you deflect one ball (the cue ball or object

ball) into another to make a shot. These shots can be difficult, but can be an important weapons if you can predict the cue ball's path. In Diagram 4, you can see that a 30-degree hit on the 3 ball will send the cue ball straight into the 9 in the corner. This shot should be easy to make, as long as you the cue ball is rolling at impact with the 3.

In every situation with the 30-degree rule, it's important to remember that it's imperative the cue ball is rolling naturally. Otherwise, the 30-degree rule does not apply (and you cannot use your peace sign).

For more information on this topic, check out my series of columns on the 30-degree and 90-degree rules on my website. I hope this will help you incorporate these ideas into your game.

Longtime BD columnist and mechanical engineering professor, Alciatore — aka “Dr. Dave” — is one of the most respected instructors in the digital world. With an ever-growing catalog of DVDs and online tutorials, Dr. Dave can't possibly get every pool shot on video but that won't stop him from trying. Check out at www.dr-dave-billiards.com for more info.

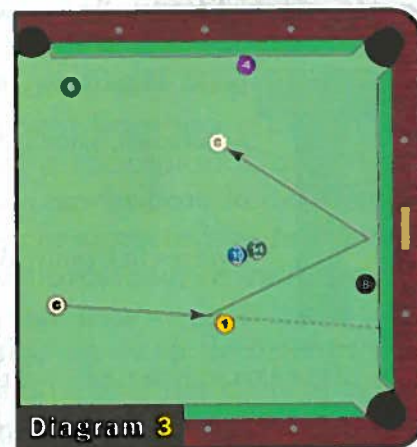


Diagram 3

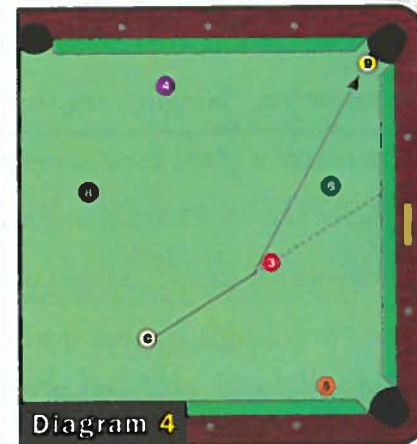


Diagram 4