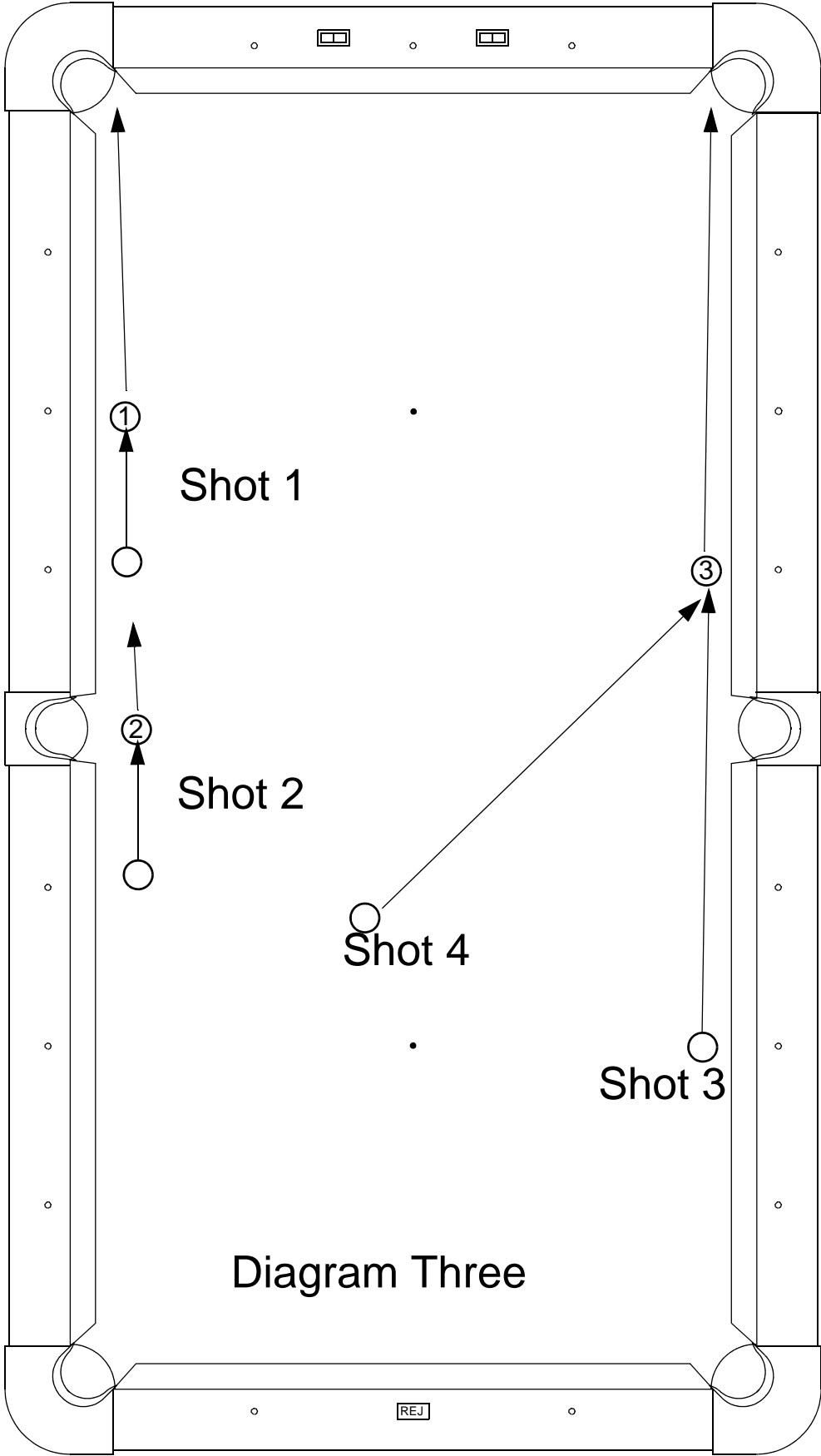


Diagram Two



Shot 1

Shot 2

Shot 4

Shot 3

Diagram Three

True/False Answers

By Bob Jewett

In the June issue I posed 25 true/false questions on a variety of billiard topics and offered prizes of books from long-time BD columnists George Fels and Robert Byrne. It's time to reveal the answers. There were a couple of typos in the quiz, but I guess figuring those out was part of the challenge. Since entries are still coming in as I write this, the winners will be announced next month.

1. Diagram One, shot 1 is a cut shot on a frozen ball sending it down the rail. The best way to make this shot is to hit the ball and the rail at the same time.

False. This topic was the subject of my first column, which had readers test the idea for themselves. You have to hit the cushion first to maximize your chances of making the ball due to throw. Unfortunately lots of old books and some current instructors say otherwise.

2. In shot 2, the bank is set up so that if you hit the 2 ball full, softly and without spin on the cue ball, it will go straight to the pocket. If you hit the same shot very firmly, the 2 will land at about point S, between a diamond and two diamonds from the pocket.

False. People have been taught that it is speed that causes the ball to bank short. That's not true. It's the lack of follow. Bob Byrne presented a simple test of the idea in these pages that debunked the speed equals short hoax. If you want to test it yourself, use a tapped-in three-ball combo to line up the bank.

3. Shot 3 is played with inside (left) English and the 3 is frozen. You can tell whether the ball or rail was contacted first because ball-first takes path B and rail-first takes path A. (Knowing which was hit first is useful if the ball doesn't get to the pocket since rail-first would then be a foul.)

False. (I made the question a little trickier by writing "right" for the side of English. Maybe George made me do that since he used the terms inside/outside opposite to the current usage.) In fact when you both make the ball and take the cue ball along path B, you have hit the rail first. The cue ball penetrates the cushion and is in the cushion when it hits the object ball. The object ball scoots along the rail and the side spin which is still on the cue ball takes after the object ball has gone. The problem with judging shots like this is that the cushion contact lasts for a long time compared to the ball-ball contact.

4. In Diagram Two, shot 1, the cue ball is frozen to the 1 ball. It is legal to pocket the 9 by using a level stroke and shooting partly into the 1 ball.

True. There are some leagues with non-standard rules that may forbid the shot.

5. To make the 9 like that you need to divide angle A in two equal parts and shoot along that angle bisector.

False. For this particular setup the cue ball will hit the long rail if you use the angle bisector. The correct way to approach the shot is to shoot at a ball that is half the distance down the rail at position X.

6. In shot 2, you can use “get-in English” on the cue ball which effectively makes the pocket larger for the 2 ball. (This idea was one of the points that George and Bob differed on.)

True. After being a “get-in English” skeptic for a long time, I finally set up an experiment that measured how large the pocket was with and without left side spin transferred onto the object ball. My result under the conditions I tested was that the pocket was roughly 20% larger with the spin. See your June 2013 BD.

7. If you have a ball at point B that is partly blocking the path of the 2 ball, it is possible to curve the 2 slightly around that blocker with the correct spin on the cue ball.

False. Maybe it is possible, but I have never seen object ball curve in that kind of situation. I’ve been offering a cash prize for a demo for a long time.

8. In Diagram Three, shots 1 and 2 are both straight in and have the cue ball the same distance from the object ball (about 1 diamond). Shot 2 requires twice the cuing accuracy of shot 1. (That is, the target on the object appears half as wide from the cue ball.)

True. This is pretty simple geometry.

9. Assuming that the second shot does require twice the accuracy as the first and you miss the easier shot one in twenty, you can expect to miss the harder shot about one in ten.

False. Due to the way errors add up, requiring twice the accuracy will cut your success rate much faster. If your cuing errors left and right follow something like a standard bell curve, the harder shot will be down at 68%, not 90%. This shows why it is important for most of us to keep the cue ball close to the object ball.

10. Shots 3 and 4 are set up with the same distances involved but shot 3 is a full-ball hit and shot 4 is about a quarter-ball hit. Shot 4 has a target about one fourth the size as for shot 3.

False. While psychologically shot 4 looks a lot harder, the actual target is 70% the size of the shot 3 target.

11. Willie Mosconi set the competitive high run record at straight pool in 1954 in Springfield, Ohio and that record still stands today, over 60 years later.

False. The run of 526 still stands as the exhibition high run. The competition high run is held by Darren Appleton who ran 200-and-out against Francisco Bustamante in the 2013 edition of the World Tournament of 14.1.

12. The longest run of consecutive scoring shots at any form of cue sport was set by an Englishman, was over 240,000 shots, was on a 6-by-12 foot table, and took five weeks to complete.

True. Tom Reece did it in 1907. Wikipedia knows.

13. At 3-cushion billiards, modern players routinely score at twice the rate (per-inning average) that Willie Hoppe produced.

True. In Hoppe's day, intentional safeties were allowed, which accounts for part of the difference. The faster, heated tables and the many professional events have pushed top tournament averages up to over 2.5 billiards per inning. Hoppe's best was about 1.3.

14. To move the cue ball the same distance after a straight-in shot, a draw shot requires considerably more speed than a follow shot.

True due to the loss of draw on the way to the object ball. Put the object ball in the middle of the table and see how hard you have to hit the cue ball to move it four diamonds forward and four diamonds back.

15. If you play a side-spin shot with a level cue, the cue ball will not curve to the side of the spin.

True. The caveat is that nearly all shots are played with elevation due to rails and knuckle preservation. You can measure the degrees of elevation by noting two distances in inches: the height of the center of the tip above the cloth (usually about an inch and an eighth) and the height of the center of the bumper above the cloth (often about six inches). The difference is very nearly the elevation of the stick in degrees.

16. For a normal side-spin shot, the squirt will always dominate over the swerve. That is, the ball will never swerve back to cross the original line of the cue stick.

False. This depends on a lot of parameters: the cue stick, the elevation, the amount of side and draw, the speed of the shot. Try shooting along a rail starting with the cue ball just off the rail and your cue stick parallel to the rail. With rail-side English, does any combination of the above get the cue ball back to the cushion?

17. It is not possible to transfer useful side spin to the object ball.

False. Many useful bank shots are made every day thanks to side spin on the object ball. Sadly, some instructors teach otherwise. Also, the "get-in English" mentioned above is transferred side on the object ball.

18. As long as you do not use side spin, the ghost ball aiming system (land the cue ball so that the centers of the two balls are exactly in-line to the pocket at the instant of contact) is guaranteed to pocket the ball for any cut angle.

False. Contact-induced throw (the cue ball rubbing sideways during the collision to pull the object ball off line) needs to be included. Sometimes that is as much as six degrees, which is about six inches in four diamonds of ball travel. That's a lot.

19. It is impossible to make a 90-degree cut shot if you are not allowed to masse or jump the cue ball.

False. In fact with extreme outside English, 90-degree cut shots are practical in some situations. They are easier with sticky equipment.

20. For a half-ball shot (with the path of the center of the cue ball directed at the edge of the object ball) the cut angle will be 45-degrees, ignoring friction.

False. A half-ball shot is a 30-degree cut or perhaps 28 if you include friction.

21. With an old, well-used set of balls, playing draw will likely be quite a bit harder.

False. Usually it's easier because the cue ball wears down faster than the object balls and the light cue ball bounces back off the heavier object balls.

22. The most common overlooked foul at nine ball is the double hit.

False. I'm open to considering more data on this one, but I think touching balls prior to the end of the last shot is more common. Pattern racking, which is a foul, probably takes first these days among the pros.

23. The referee is not allowed to give any assistance to the player.

False. In all three major disciplines the referee is allowed to help by holding the light out of the way for masse shots. Often refs help with the bridge. At pool the ref can explain the rules.

24. When playing an intentional foul, perhaps at straight pool or one pocket, tapping the cue ball with the side of the stick or simply passing the shot are both options.

False. Ferrule slapping is not a permitted stroke. Even when taking a foul you have to do it with a valid stroke. Also, the rules do not permit passing when it is your turn to shoot; you have to take a shot.

25. In a nine ball rack, the one ball goes on the foot spot and is the only ball other than the nine that has a set place in the rack pattern.

True and false. Under World Standardized Rules, major events now must rack the nine on the spot to prevent soft wing-ball breaks. Some tournaments specify that the 2 ball must go in back.