

Pool Quotient

By

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Introduction

Pool Quotient (PQ) is a test of a player's current ability. It consists of six subtests that are common to many pocket billiards games. The PQ Score is used to assess the skill level of a player from novice to professional. The scores can be used to evaluate a player's progress in many ways:

- ✳ Assess skill relative to league and professional players.
- ✳ Determine areas of weakness.
- ✳ Assess improvement over time.
- ✳ Evaluate potential equipment.
- ✳ Create handicaps for various games and equipment.
- ✳ Evaluate instructional programs with pre - post testing over a period of time.

Pool Quotient is a measure of how well the player shoots and controls the balls in pocket billiards. The test allows for the beginning player to obtain a score and will challenge the most advanced players. The first four sub-tests are based on the *Progressive Drills* developed by Bob Jewett ([1992](#), [2005](#), and [2008](#)). Some of Jewett's ideas were used by Ron Sheppard ([1997](#)) in the development of the *Argonne Handicapping System*. Jewett has generously given permission for the use of the revised models shown here. His ideas on progressive drills and individual development through training should be in the library of any serious player ([2007](#)). While many ideas from Jewett's *Progressive Drills* have been used here, any alterations, errors and omissions are those of the current author.

It is expected that few, if any, players can obtain a perfect score. The test ceiling (top score) allows for assessing the skills of any player. If it were possible to obtain the top score the test would not be able to discriminate between those players who obtain high scores. Somewhat like measuring how tall people are, if the ruler were only six feet long then we could not tell how tall a person is who is taller than six feet. To determine the differences between very tall people a ruler is needed that is longer than the tallest person. The same idea is true for a test. To measure the tallest of the tall we need a test on which no one is expected to get a perfect score.

The "floor" of a test allows for the assessment of any person's ability as a place from which they can start to play. Therefore, some of the shots must be very easy so that anyone who takes the test will obtain a score.

One of the problems in test construction is to create a test that is inherently interesting. Players with limited skills should not be dissuaded and excellent players should not be

bored. To maintain interest the sub-tests begin where the player feels comfortable by allowing the player to select the difficulty of a shot and then demonstrate that they can reliably make the shot.

Reliable shot making is defined as making the shot three out of four times. This repetition insures that the pocketing distance or difficulty is an accurate estimate of the player's ability.

The test consists of six individual shots that are fundamental to pool playing ability.

The assessment allows the user to determine one's ability in approximately 30 minutes (estimate). These results can be used to create handicaps for any new player.

Test Administration Instructions

The player should be comfortable with the table conditions and feel that they are playing at their usual level. Play one or two racks of 8-Ball or 9-Ball to warm up.

There are six groups of shots diagrammed for a right-handed player. Left handed players may prefer to switch sides of the table. Where indicated, the cue ball should be close to the side cushion, but not so close as to cause the player difficulty in forming a bridge.

In each case, a success means that the object ball was pocketed correctly and, where indicated, the cue ball was positioned within the target zone. A cue ball scratch counts as a miss.

The most reliable score would be obtained by completing the assessment on two occasions separated by one week.

The Appendix contains a data collection form to be completed at the pool table.

General Scoring Rules:

Score values are relative to the diamonds on the table as shown to the left of the table diagrams displayed on the next pages. Note that some shots have a maximum score of "7" while others have a maximum of "8."

The farthest diamond or ½ diamond from which the player can *consistently* make the described shot is the score for that shot. All other score will be rounded to the nearest ".5" value.

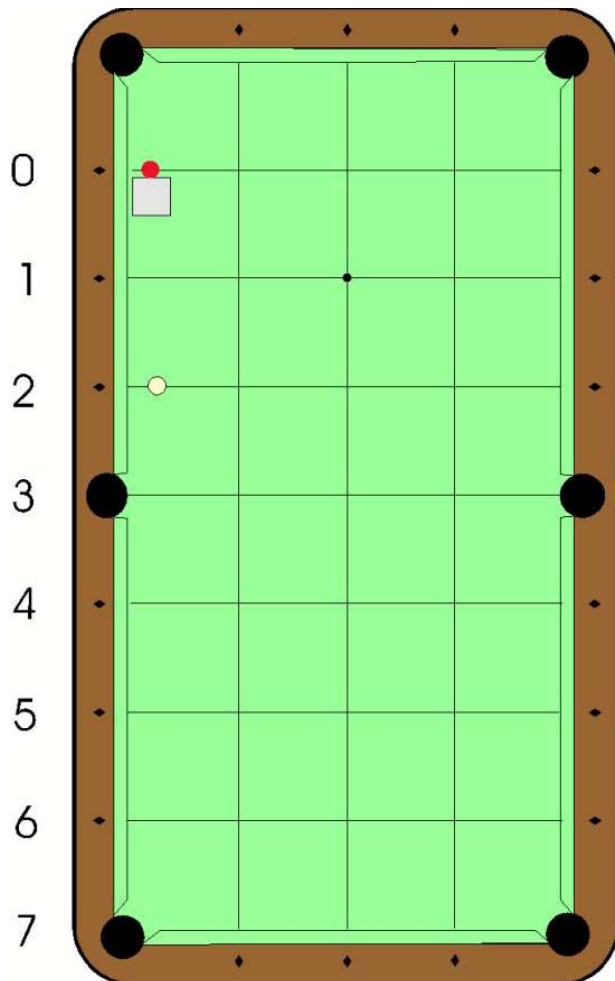
Consistency is defined as making the shot on three of four consecutive shots. The player should begin a group of shots at an estimated starting point that is close to his final score, or at diamond 2 if no estimate can be made.

The player should move back by one-half diamond increments until there are two successive failures.

Move the cue ball one-half diamond closer to the object ball from the point of failures and make the object ball on three of four attempts (if this has not been done).

Record the result on the data sheet as the data are collected. A coin can be placed on the rail to mark the last place where the player made the shot three of four times. A ten cent piece can be used to mark the current place from which the player is working.

1. Stop Shot



A target can be made by folding a sheet of paper on each axis and cutting out a 4.25" X 5.5" sheet. The 4.25" side is oriented towards the length of the table.

The object ball (OB) is placed one ball width from the side rail on diamond 0 in this diagram.

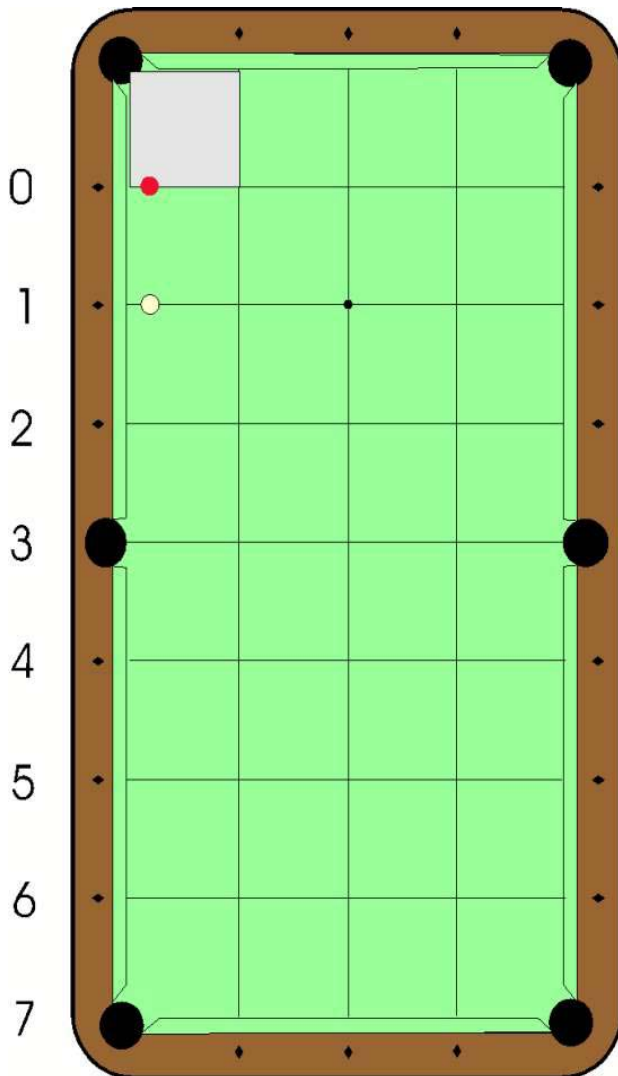
Player places the Cue Ball (CB) on a diamond or half diamond as needed. Begin with diamond two if player does not know where to start. Use a coin on the rail to mark the CB position.

Find the diamond that is the farthest away from the OB where the player can make the OB and stop the CB within 4.25" of the OB on three of four trials.

The edge of the cue ball must come to rest in the target area. Use the target after the shot has been attempted to measure. Maximum score = 7.

If CB hits rail score = 0

2. Follow Shot

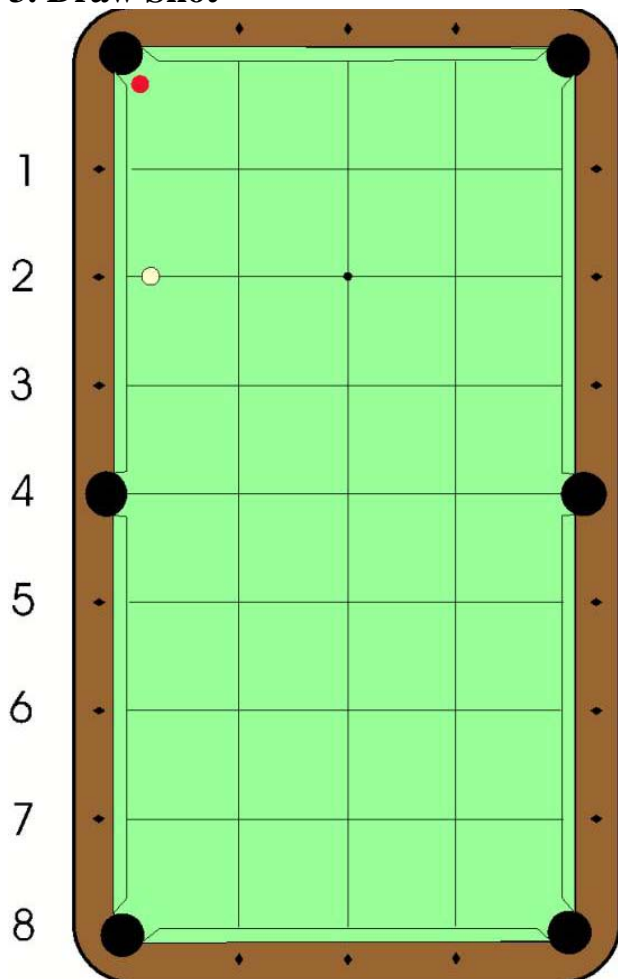


Pocket the OB in the corner pocket and position the CB's edge within a one-diamond square of the corner pocket without touching a rail. Use a coin to mark the CB start position.

In this group of shots, *both* the CB and the OB are moved back farther from the pocket upon success, and moved closer to the corner pocket upon a failure. The distance between the CB and OB is at least $\frac{1}{2}$ diamond. The player is allowed to make small sideways adjustments to the initial cue ball position.
Maximum score = 7.

If the CB hits rail score = 0
If CB is pocketed score = 0

3. Draw Shot



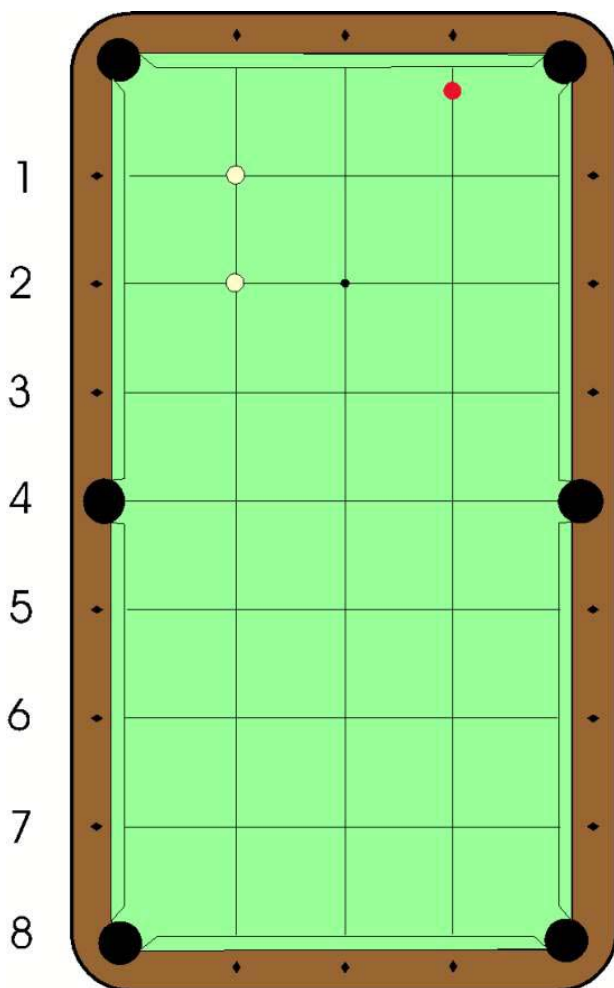
The OB position remains fixed in the center of the pocket opening and a ball width from the end cushion.

*Pocket the OB and draw the CB straight back to at least the *starting* position of the CB and no more than one diamond past the starting position. Use a coin on the rail to mark the starting position.*

The CB and the target area are moved further or closer upon success or failure. Find the diamond (or half diamond) from which this shot can be made on three of four trials.
Maximum score = 8

Score 0 if shot is missed.
Score 0 if any rail is hit.

4. Cut Shot



Pocket the OB in the corner pocket without scratching.

The OB position is one diamond from the pocket and one ball's width from the end cushion.

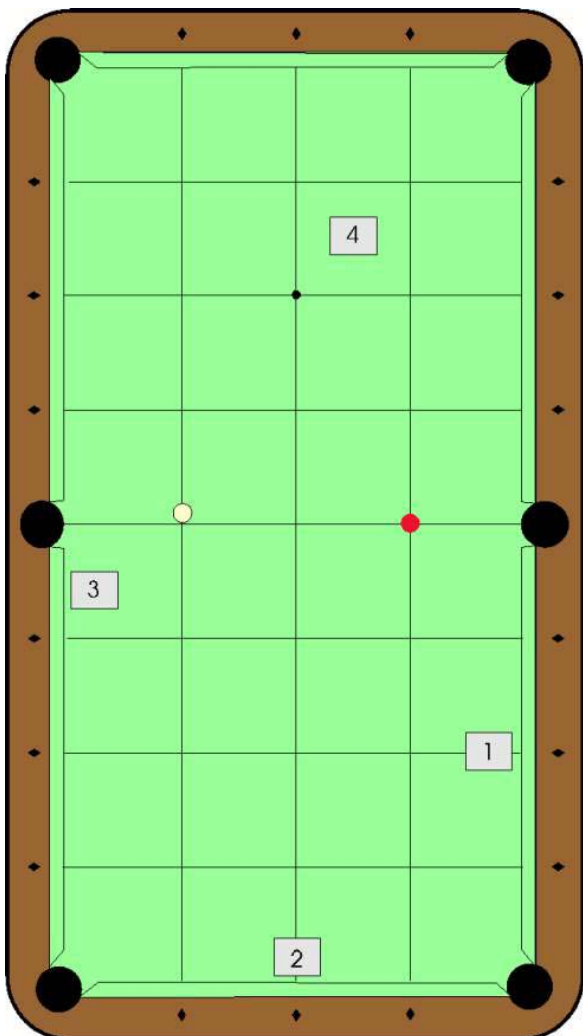
The CB is one diamond from the side rail as shown by the first and second CBs in the diagram. When the shot has been made on three of four attempts, back-up the CB at least 1/2 diamond.

Score is the farthest diamond (or half diamond) number from which the OB can be made three of four times. Mark the rail with a coin at the current score.

Maximum score = 8.

Score = 0 if CB scratches.

5. Position Shot



Make a target by folding a sheet of 8.5" X 11.5" paper on each axis. Cut with scissors to make a 4.25" X 5.5" target. Torn sheets may provide a hindrance to cue ball roll. The 4.25" side of the target is on the length of the table.

Place CB, OB begin in the same positions shown. The target is moved as indicated for each shot.

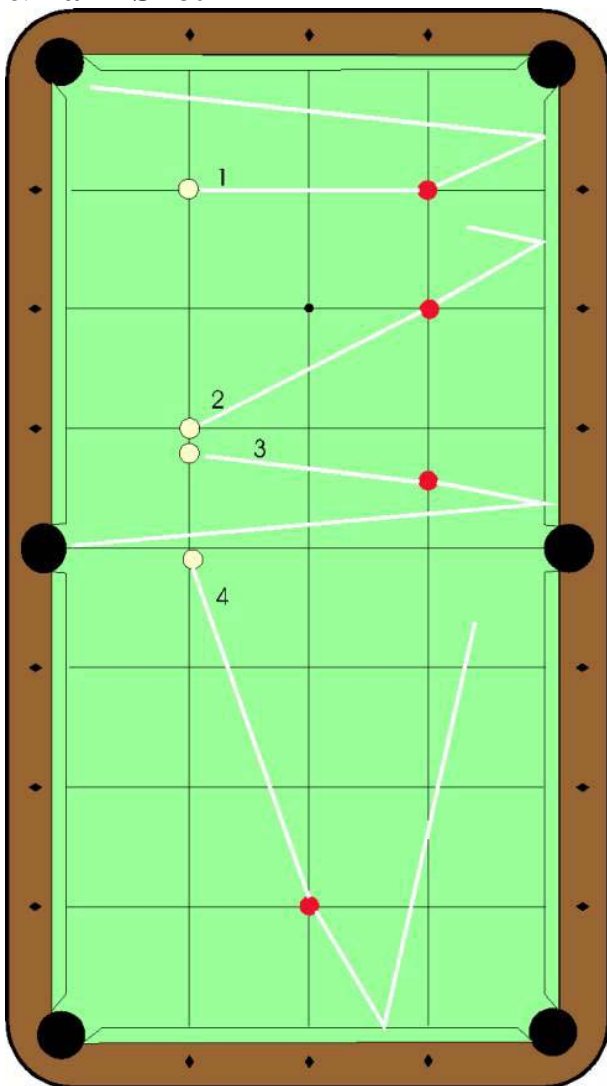
Player makes **two** attempts, Score one point each time the CB comes to rest on the target. The maximum score = 8.

Score 0 if OB not pocketed.

Score 0 if CB is not on the target.

Score 0 if cue ball is touching the rail.

6. Bank Shot



Set the CB and OB as indicated for each shot and bank to the indicated pocket.

The player makes two attempts.
Score one point each time the shot is successful.

Maximum score = 8.
Score 0 if there is a scratch.

APPENDIX**Pool Quotient Data Collection Form**

Today's Date
Length of table used (7,8,9,12)	
1 Stop Shot score	
2 Follow Shot	
3 Draw Shot	
4 Cut Shot	
5 Position Shot	
6 Bank Shot	
PQscore (sum of 1-6)	
Hopkins Q skill score (10 racks)	
Fargo Score (10 racks)	