

# Fractional Aiming — Ball Overlap

## What Is Fractional Aiming?

Fractional aiming gives players a **visual way to recognize aiming points** consistently. Rather than trying to calculate a cut angle, you learn to see how much of the object ball the cue ball should cover at contact — and that picture becomes your aim. Over time, these visual references become instinctive.

There are three key reference positions: a thin hit (1/4 ball), the anchor (1/2 ball), and a fuller hit (3/4 ball). Each produces a different cut angle and gives you a clear visual picture to aim for.

## The Three Reference Positions



What each fractional position looks like at contact. Left: 1/4 ball (thin cut, 48.6°). Middle: 1/2 ball anchor (30.0°). Right: 3/4 ball (fuller cut, 14.5°).

	1/4 Ball	1/2 Ball ★	3/4 Ball
Cut Angle	48.6°	30.0°	14.5°
Overlap	25%	50% — anchor	75%
Character	Thin cut	Learn this first	Fuller cut

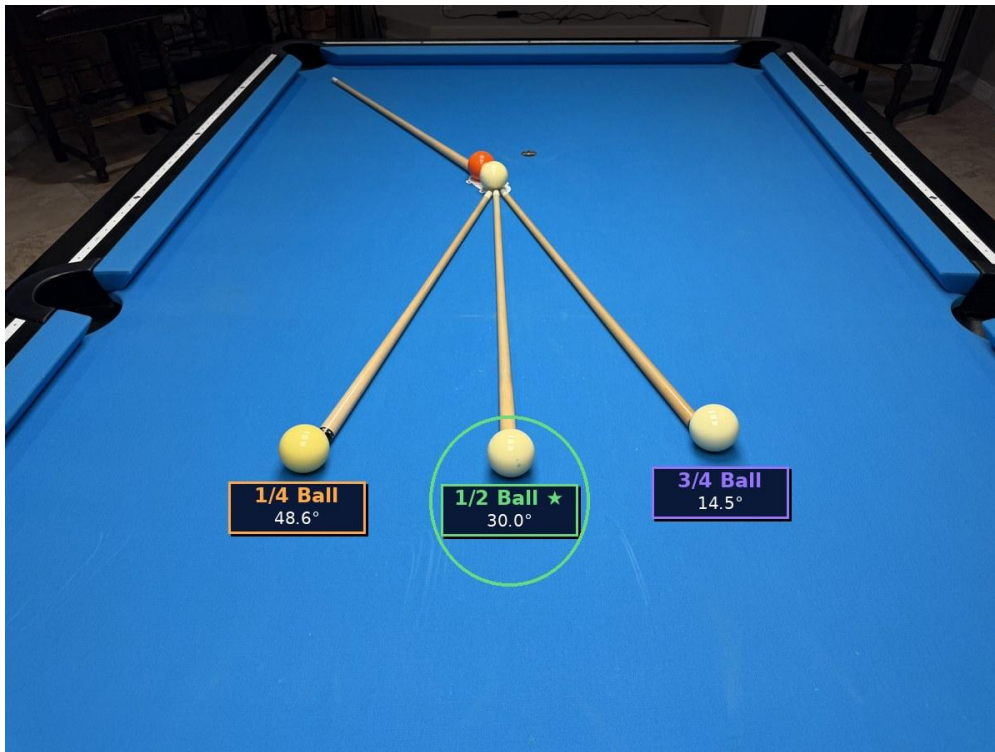
## Recognizing the Angle from the Table

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Before you step into your stance, stand back and read the shot. The **angle of the shot line** — how steep or shallow it is relative to the pocket — is your first clue for which fractional position to use.

**Steep angle** → Thin hit. Use 1/4 ball (48.6°). The cue ball takes a sharp path to the pocket.  
**Moderate angle** → Start here. Use the 1/2 ball anchor (30.0°). This is your most reliable reference.  
**Shallow angle** → Fuller hit. Use 3/4 ball (14.5°). The object ball travels nearly straight to the pocket.

The three cue stick positions in the photo below correspond directly to these three angles as they appear on the table. Training yourself to see the angle first — before you aim — is what turns fractional aiming from a system you calculate into a picture you simply recognize.



Three fractional positions as they appear on the table. The angle of each cue shows the shot line for that fractional hit. Left: 1/4 ball (steep). Center: 1/2 ball anchor (moderate). Right: 3/4 ball (shallow).

## The 1/2-Ball Hit — Your Anchor

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### Why Start Here?

The half-ball hit is the single most important aiming reference in pool. **Learn this one first.** Every other shot is simply a little thicker or thinner than a half-ball hit. Once you own this picture, every other cut angle becomes an adjustment from a known point.

❖ **The Anchor Principle:** Don't try to memorize all three positions at once. Start with the half-ball hit and make it automatic. Every other aiming decision becomes a simple adjustment: a little fuller of a hit, or a little thinner of a hit.

## Special Properties of the Half-Ball Hit

- **30° cut angle:** The half-ball hit produces a 30° cut angle, connecting directly to the 30-degree rule for CB position play.
- **Equal ball separation:** Both the CB and OB separate at roughly equal angles from the shot line — clean, symmetric geometry that is easy to repeat.
- **Center-to-edge aim:** The center of the CB aligns with the outer edge of the OB — one of the clearest visual references at the table.
- **Ghost ball connection:** The ghost ball sits with its center exactly at the OB's edge — the clearest demonstration of ghost ball aiming.

## Ball Coverage & Cut Angle

The core of the system: more coverage means less cut; less coverage means more cut.

**More overlap (fuller hit)** → Less cut angle. The OB travels closer to the original shot line direction.

**Less overlap (thinner hit)** → More cut angle. The OB deflects further from the shot line direction.

## Using Fractional Aiming at the Table

The goal is not to count fractions while standing at the table. The goal is to build a **visual library** of what each contact point and angle looks like. Here is a simple progression:

- **Step 1** — Own the 1/2-ball anchor. Practice until the picture of CB center at OB edge is automatic.
- **Step 2** — Add the 3/4 and 1/4 positions. Practice recognizing the angle from standing back, then confirm with the overlap picture.
- **Step 3** — At the table: read the angle first, identify the closest fractional position, then step in and aim from that picture.

💡 **Practice tip:** Practice standing back and calling the shot angle before stepping in — “that’s about a 1/2 ball” or “that’s thinner, more like 1/4.” Your eyes learn faster when you commit to a read before aiming.