## Rod $\varepsilon$ Reel

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## 1.Introduction:

Rod and Reel is a card game that simulates a fishing tournament within an RPG.
Required for play are three standard decks of playing cards, 3 poker chips or equivalent for each participant, a d20, a sheet of paper, and a pen. In addition, poker chips of different colours may be used to represent a character's skill pool.

Participants are either Players of the game in which the fishing tournament takes place or NPCs within that game. Any Player who is not taking part in the tournament should represent an NPC participant. The GM should also consider inviting 'guest players' to act for other NPCs but may play as multiple opponents if necessary.

Required character information is each player's STR, DEX, INT, and any relevant fishing skill.

## 2. Game Play Summary

The game consists of 6-15 rounds of card play (usually 12). A round consists of the following steps (each detailed in sections to follow):

Declare Breaking Strains
Shuffle
Deal 5
First Discard
First Draw
Second Discard
Second Draw
Scoring Attempts
Declare Scoring Attempts
Declare Use Of Pool Points
Attempt Score Conversion
Score
Final Discard
Pass Deck to the left.

## 3. Prior to Dlay

1. The GM should rough-mix the decks of cards.
2. The GM should determine and announce the number of hands that will be played.
3. The GM should determine and announce the victory conditions.
4. The GM converts each participant's Fishing Skill into points (refer below) and hand out chips to represent these if they are to be used. Denominations of 5 and 1 are recommended. If chips are not used to represent this pool, participants should note the size of the pool on scratch paper.
5. Each participant should determine the Bait/Lure Quality they are going to use (refer below) and redeem the pool point cost.

## 4. Number Of நands

Each hand represents a fixed period of time. All-day contests should have a high number of hands, short contests should have a low number of hands. The fewer the hands, the more likely it is that a given participant will have no score (i.e. will fail to catch a fish). A range of 6-15 hands is recommended.

## 5. fishing Skill Dool

Characters roll d20 and add their ranks in the appropriate fishing skill, their DEX modifier, and their INT modifier (d20). Whichever characteristic is not associated with the relevant fishing skill is optional but recommended except in the case of short games.

If the game system is not a d20 or 3d6-based system, convert scores as necessary.

If the character does not have the appropriate fishing skill, the character should use the appropriate technique from the base game system for unskilled checks to determine a total. If there is no such system, characters should roll 2 d 20 s and take the lower result, then add as above (skill ranks would be zero in this case).

If the character has a fishing skill that the GM deems inappropriate to the contest, both of the above techniques should be employed and the results averaged (round up).

The total result is the value of the Fishing Skill Pool, which can be used to obtain advantages within the contest.

If the referee wishes to increase the benefits of skilled fishing vs. luck-on-the-day and prior preparation, he may increase the size of the pool $50 \%$, or even double or triple it. Converting a good hand into a powerhouse hand or a poor hand into a good hand is very expensive; the default rules are likely to permit this only one to $11 / 2$ times in the contest. Each $100 \%$ increase in the skill pool roughly doubles that frequency (so $2 \mathrm{x}, 3 \mathrm{x}, 5-6 \mathrm{x}$ correspond to pool increases of $\mathrm{x} 11 / 2$, x 2 , and x 3 ).

## 6. Bait/Lure Quality

For the price of 10 pool points each, players can purchase the ability to retain one or two "dead cards" at the end of each round. Used strategically, this can improve the player's next catch or increase the likelyhood of getting a catch at all in a future hand.

## 7. Breaking Strain

Each round, players can choose a 'breaking strain' modifier to their score conversion attempts. These increase the weight of the possible catch, but make it more difficult to actually successfully catch the fish. Breaking strain choices may be changed from hand to hand, unlike bait/lure quality, which is fixed for the entire game once chosen.

At the start of each hand, and prior to the shuffling of the cards, players must nominate the breaking strain of the fishing line they have chosen. The choices are $+0,+2,+4$, and +6 .

- +0 means that the player has to play the cards in front of them.
- +2 permits a card of the same colour but a different suite to be counted amongst the three value cards.
- +4 permits one card of a different colour to be counted amongst the three
- +6 would permit the cards to be of completely different suites.

It can be assumed that a character who has opted for anything less than the maximum -6 penalty may well have caught a bigger fish in the course of a round of play than the one they eventually attempt to land, but that if they did, the line broke.

Breaking strains are decided by each Player at the start of each hand and revealed simultaneously. It is recommended that Poker chips or similar be used as an indicator of the breaking strain chosen for the hand.

## 8. Shuffle Cards

It may be easier to rough-shuffle the deck, split the contents amongst several players who give their share a thorough shuffle, and then merge those sub-decks into a larger deck with another rough-shuffle. Any card whose face is accidentally revealed should be inserted randomly into the deck.

## 9. Deal 5

Starting with the player to the dealer's right, each player is dealt a card until each has a total of 5 cards (including any held over from previous hands).

## 10. first Discard

Players may discard up to two cards. These must include any face cards with which they will not attempt to score this round, unless discarding all the excess face cards would drop their hand size to less than three cards. Cards are discarded face down on the bottom of the deck.

## Il. first Draw

Starting from the first player to the dealer's right, each player is dealt enough cards to bring their hand to a total of 7 cards.

## 12. Second Discard \& Draw.

Starting from the dealer's right, each player must now discard one card, face-up, and then draw two more, to give a total hand of 8 cards.

A character who is cheating may take the face-up card that was topmost of the discards before their discard was placed on the stack as one of their two cards.


## 13. Scoring Attempts

There are 4 scoring combinations:

- Ace
- King + Queen (suited)
- King + Jack (suited)
- Queen + Jack (suited)

These have different scoring potential according to suit. The ranking of suits (high to low) is:

1. Hearts
2. Diamonds
3. Clubs
4. Spades.

Any other face card in the player's hand is a dead card (ie has no value in the hand), though it may be used as the basis of a scoring attempt in a later round.

Scoring attempts start with the Player to the dealer's right, who places the scoring combination face up in front of them. Any Player who does not do so when it is his turn should announce "no score".

## 14. Score Values

Score values are determined from the scoring combination, the suit of the scoring combination, and the highest run of up to three non-face cards that the character can present. These must all be of the same suit (but do not have to be the same suit as that of the scoring combination), and may not contain duplicate cards.

If a card is missing from the run, cards below the consecutive sequence count for just 1 point unless the character uses pool points to 'plug the gap'.

10,9 is a valid scoring combination, and so is $10,9,8$, or $9,8,7$, or 5,4 , or even 3,2 , or even a single card. A single 10 card is worth more than a $4,3,2$ combination, a single 6 card is worth more than a 3,2 combination, and so on. 10,9 , \# is a valid combination provided that \# is not a 10 or 9 , but the \# only counts as a 1 unless the gap is 'plugged'. The same is true of 8,7 , \#, or even $8,6,5$. No more than three cards can contribute to the run.

These non-face cards are referred to as "Value Cards" and those used to score are placed face-up in front of the player, next to the cards making up the Scoring Combination, so that their values are visible. The other cards in the player's hand are considered "dead cards".

A complete list of scoring Value card combinations is appended to these rules.


## 15. Use of Dool Doints

Provided that a character has enough pool points remaining to do so, they can expend these points to 'plug a gap' in a run. The number of points taken from the character's pool is equal to the face value(s) of the cards being replaced. These missing cards still do not score, but neither do they reduce the total value of the scoring hand.

These points should be crossed off the player's tally of available points or the chips representing them placed with the Value Cards, as per the method of tracking the pool being used.

## 16. Scoring

If the player succeeds in converting their score, it is recorded by the dealer. Depending on the victory conditions, previous scores may be added to this to get a total score, or a lower value score crossed out.

Score: As shown below, plus the total of the Value Cards as described previously.
Ace of Hearts: 93
Ace of Diamonds: 75
Ace of Clubs: 60
Ace of Spades: 40
King + Queen of Hearts: 75
King + Queen of Diamonds: 60
King + Queen of Clubs: 45
King + Queen of Spades: 30
King + Jack of Hearts: 53
King + Jack of Diamonds: 40
King + Jack of Clubs: 28
King + Jack of Spades: 13
Queen + Jack of Hearts: 45
Queen + Jack of Diamonds: 30
Queen + Jack of Clubs: 19
Queen + Jack of Spades: 8


After all players have scored for the hand or announced "no score", the dealer compares the scores to the victory conditions and announces a winner (if there is one).

The weight of the fish may be determined by the GM according to knowledge that he has or available references, or may be determined by dividing the score by a fixed amount. 10 is recommended for freshwater/stream/lake fishing, while deep-sea game fishing may have a division by as little as 0.2 (i.e. multiply the scores by 5 ).

It is anticipated that each scoring combination represents a different species of fish, but this may be varied by the GM; it has no bearing on the game and is merely roleplaying 'colour'.

## 17. Score Conversion Attempts

Before a score can be counted, it must be converted from a possible score into an actual score. An attempt to score represents a fish 'biting'; the conversion process is the act of actually catching the fish. This requires the character to roll the d20 as follows:

The GM rolls a d20 and adds $1 /$ tenth of the value of the hand (i.e. the fish's weight), and adds the modifier for the breaking strain of the line. The result is the total needed by the character.

Then the player (who may also be the GM, in the guise of an NPC) rolls a d20, and adds the character's strength modifier. If this total is equal to or more than the required target, the character scores the points, i.e. catches the fish they had on the line; if not, the fish gets away, and the character has to try again in the next hand.

## 18. final Discard

All face-up cards are turned face-down and handed to the dealer, who places them at the bottom of the deck.

Each player then discards any cards remaining in their hand except those which have been exempted by the use of the Bait/Lure Quality ability.

Used chips are discarded.
The dealer then hands the deck to the player on their left (so the dealer will be the first to act in the next round) and a new hand begins.

## 19. Victory Conditions

There are five possible victory conditions. The GM should determine which will apply to any given contest:

1. 'Biggest single fish' (i.e. single best score from all rounds, ties decided by countback)
2. 'Total weight of catch' contest (i.e. total points scored)
3. 'First to catch a fish' (first person to score, ties decided by size of catch)
4. "First to catch a fish of minimum weight or better' (ties decided by size of catch)
5. 'First to catch a defined weight of fish' (first to reach a specified total score, ties decided by total weight caught).

## 20. Other Rules

## Accusations Of Cheating in the second draw:

Characters who are "cheating" in the approved manner described above may be accused of doing so by any other player in the game. The time required means that the player making the accusation must drop out of the competition for a round, drawing no cards, and with no potential to score.

The GM \& Players should roleplay any investigation as normal, even while a game of Rod \& Reel is underway. If the accusation is upheld, the accused player will be removed from the fishing competition. False or unproven accusations should impact the character making the accusation and their associates in subsequent roleplay, and will usually be to their detriment.

Note that it is not enough for a player or the GM to simply announce that character X is cheating and proceed to take advantage of the opportunity given under these rules; they must provide, in writing, an explanation for how the character is cheating, and the GM must adjudicate the success or failure of the technique. Similarly, when accused, it is not enough to simply claim that character " X " is cheating; the manner of the cheating must be specified in the accusation and compared with the written explanation by the GM.

## 2l. Larger Cournaments

While these rules can (in theory) handle up to 15 "fishermen", eight is a more practical limit. If there are more than that competing, a tournament-style game should be organised - shorter games of up to eight "fishermen" each to act as qualifying rounds, the top three or four to progress to the next stage of the tournament. The details are left to the GM.

Note that it will frequently be simpler and easier simply to announce that these are the "top eight" after qualifying.

## 22. Other Uses for these rules

Because these rules are all about a means of simulating the catching of fish, they may also be used for non-competitive purposes, e.g. determining how long it takes to catch a certain number or weight of fish in an outdoors setting. The same rules can be used for any type of hunting or gathering of food or any similar activity.


Appendix 1: Complete list of natural scoring combinations

| A | A | A* | A ${ }^{\text {a }}$ | KQ | KQ* | KQ* | KQA | KJ $\downarrow$ | KJ | KJ\& | KJa | QJv | QJ | QJa | QJa |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 93 | 75 | 60 | 40 | 75 | 60 | 45 | 30 | 53 | 40 | 28 | 13 | 45 | 30 | 19 | 8 |

## 27

10, 9, 8

## 26, 25

No combinations

## 24

9, 8, 7

## 23. 22

No combinations

## 21

8, 7, 6

## 20

10, 9, 7
10, 9, 6
10, 9, 5
10, 9, 4
10, 9, 3
10, 9, 2

## 19 <br> 10, 9

## 18

9, 8, 6
$9,8,5$
9, 8, 4
9, 8, 3
9, 8, 2
7, 6, 5

## 17

9, 5
9, 4
9, 3
9, 2

## 16

8, 7, 5
8, 7, 4
8, 7, 3

## 16 cont. <br> 8, 7, 2

## 15

8, 7
6, 5, 4

## 14

7, 6, 4
7, 6, 3
7, 6, 2

## 13

7, 6

## 12

10, 8, 7 (NB. 8, 7=15)
10, 8, 6
$10,8,5$
10, 8, 4
10, 8, 3
10, 8, 2
10, 7, 6 (NB. 7, 6=13)
10, 7, 5
10, 7, 4
10, 7, 3
10, 7, 2
10, 6, 5
10, 6, 4
10, 6, 3
10, 6, 2
10, 5, 4
10, 5, 3
10, 5, 2
10, 4, 3
10, 4, 2
10, 3, 2
6, 5, 3
6, 5, 2
5, 4, 3
11
10, 8
10, 7
10, 6

11 cont.
10, 5
10, 4
10, 3
10, 2
9, 7, 6 (NB. 7, 6=13)
9, 7, 5
9, 7, 4
9, 7, 3
9, 7, 2
9, 6, 5 (NB. 6, 5=11)
9, 6, 4
9, 6, 3
9, 6, 2
9, 5, 4
9, 5, 3
9, 5, 2
9, 4, 3
9, 4, 2
9, 3, 2
6, 5

## 10

10
9, 7
9, 6
8, 6, 5 (NB. 6, 5=11)
8, 6, 4
8, 6, 3
8, 6, 2
8, 5, 4
8, 5, 3
8, 5, 2
8, 4, 3
8, 4, 2
8, 3, 2
9
9
8,6
8,5
8,4
8,3
8,2
$7,5,4$ (NB. $5,4=9)$
$7,5,3$

## cont.

7, 5, 2
7, 4, 3
7, 4, 2
7, 3, 2
5, 4
4, 3, 2

## 8

8
7, 5
7, 4
7, 3
7, 2
6, 4, 3
6, 4, 2
6, 3, 2
7
7
6,4
6,3
6,2
$5,4,2$
4,3

## 6 <br> 6

5, 3
5, 2

## 5

5
4, 2
3, 2

## 4

4

## 3

3

## 2

2

Appendix II: Complete list of scoring combinations using pool points, by score


## 27

10, 9, 8

## 26

$10,9,7+8 \mathrm{pp}$

## 25

$10,9,6+15 \mathrm{pp}^{* *}$
$10,8,7+9 \mathrm{pp}$

## 24

9, 8, 7
$10,9,5+21 \mathrm{pp}^{* * *}$
$10,8,6+16 \mathrm{pp}^{* *}$
$9,8,6+7 \mathrm{pp}$

## 23

10, $9,4+26 \mathrm{pp}^{* * *}$
$10,8,5+22 \mathrm{pp}^{* * *}$
$10,7,6+17 \mathrm{pp}^{* *}$
$9,8,5+13 \mathrm{pp}^{*}$

## 22

$10,9,3+30 \mathrm{pp}^{* * *}$
$10,8,4+27 \mathrm{pp}^{* * *}$
$10,7,5+23 \mathrm{pp}^{* * *}$
$9,8,4+18 \mathrm{pp}^{* *}$
$9,7,6+8 \mathrm{pp}$

## 21

8, 7, 6
$10,9,2+33 \mathrm{pp}^{* * *}$
$10,8,3+31 \mathrm{pp}^{* * *}$
$10,7,4+28 \mathrm{pp}^{* * *}$
$10,6,5+22 \mathrm{pp}^{* * *}$
$9,8,3+22 \mathrm{pp}^{* * *}$
$9,7,5+14 \mathrm{pp}^{*}$

## 20

10, 9, 7
10, 9, 6
10, 9, 5
10, 9,4
10, 9, 3

## 20 cont.

10, 9, 2
$10,8,2+34 \mathrm{pp}^{* * *}$
$10,7,3+31 \mathrm{pp}^{* * *}$
$10,6,4+27 \mathrm{pp}^{* * *}$
$9,8,2+25 \mathrm{pp}^{* * *}$
$9,7,4+19 \mathrm{pp}^{* *}$
$9,6,5+15 \mathrm{pp}^{* *}$
$8,7,5+6 \mathrm{pp}$

## 19

10, 9
$10,7,2+33 \mathrm{pp}^{* * *}$
$10,6,3+31 \mathrm{pp}^{* * *}$
$10,5,4+28 \mathrm{pp}^{* * *}$
$9,7,3+23 \mathrm{pp}^{* * *}$
$9,6,4+20 \mathrm{pp}^{* * *}$
$8,7,4+11 \mathrm{pp}^{*}$
$8,6,5+7 \mathrm{pp}$

## 18

9, 8, 6
9, 8, 5
9, 8, 4
9, 8, 3
9, 8, 2
7, 6, 5
$10,8+9 \mathrm{pp}$
$10,6,2+34 \mathrm{pp}^{* * *}$
$10,5,3+32 \mathrm{pp}^{* * *}$
9, 7, $2+26 \mathrm{pp}^{* * *}$
$9,6,3+24 \mathrm{pp}^{* * *}$
$9,5,4+21 \mathrm{pp}^{* * *}$
$8,7,3+15 \mathrm{pp}^{* *}$
$8,6,4+12 \mathrm{pp}^{*}$

## 17

9, 5
9, 4
9, 3
9, 2
$10,7+17 \mathrm{pp}^{* *}$
$10,5,2+35 \mathrm{pp}^{* * *}$
$10,4,3+33 \mathrm{pp}^{* * *}$
$9,6,2+27 \mathrm{pp}^{* * *}$
$9,5,3+25 \mathrm{pp}^{* * *}$

## 17 cont.

$8,7,2+18 \mathrm{pp}^{* *}$
$8,6,3+16 \mathrm{pp}^{* *}$
$8,5,4+13 \mathrm{pp}^{*}$
$7,6,4+5 \mathrm{pp}$

## 16

8, 7, 5
8, 7, 4
8, 7, 3
8, 7, 2
$10,6+24 \mathrm{pp}^{* * *}$
$10,4,2+36 \mathrm{pp}^{* * *}$
$9,7+8 \mathrm{pp}$
9, 5, $2+28 \mathrm{pp}^{* * *}$
$9,4,3+26 \mathrm{pp}^{* * *}$
$8,6,2+19 \mathrm{pp}^{* *}$
$8,5,3+17 \mathrm{pp}^{* *}$
$7,6,3+9 \mathrm{pp}$
$7,5,4+6 \mathrm{pp}$

## 15

8, 7
6, 5, 4
10, $5+30 \mathrm{pp}^{* * *}$
$10,3,2+37 \mathrm{pp}^{* * *}$
$9,6+15 \mathrm{pp}^{* *}$
$9,4,2+29 \mathrm{pp}^{* * *}$
$8,5,2+20 \mathrm{pp}^{* * *}$
$8,4,3+18 \mathrm{pp}^{* *}$
$7,6,2+12 \mathrm{pp}^{*}$
$7,5,3+10 \mathrm{pp}^{*}$

## 14

7, 6, 4
7, 6, 3
7, 6, 2
$10,4+35 \mathrm{pp}^{* * *}$
$9,5+21 \mathrm{pp}^{* * *}$
$9,3,2+30 \mathrm{pp}^{* * *}$
$8,6+7 \mathrm{pp}$
$8,4,2+21 \mathrm{pp}^{* *}$
$7,5,2+13 \mathrm{pp}^{*}$
$7,4,3+11 \mathrm{pp}^{*}$
$6,5,3+4 \mathrm{pp}$

## 13

7, 6
$10,3+39 \mathrm{pp}^{* * *}$
$9,4+26 \mathrm{pp}^{* * *}$
$8,5+13 \mathrm{pp}^{*}$
$7,4,2+14 \mathrm{pp}^{*}$
$6,5,2+7 \mathrm{pp}$
$6,4,3+5 \mathrm{pp}$

## 12

$10,8,7$ (NB. $8,7=15$ )
10, 8, 6
$10,8,5$
10, 8, 4
10, 8, 3
10, 8, 2
$10,7,6$ (NB. 7, 6=13)
10, 7, 5
10, 7, 4
10, 7, 3
10, 7, 2
10, 6, 5
10, 6, 4
10, 6, 3
10, 6, 2
10, 5, 4
10, 5, 3
10, 5, 2
10, 4, 3
10, 4, 2
10, 3, 2
6, 5, 3
6, 5, 2
5, 4, 3
$10,2+42 \mathrm{pp}^{* * *}$
$9,3+30 \mathrm{pp}^{* * *}$
$8,4+18 \mathrm{pp}^{* *}$
$7,5+6 \mathrm{pp}$
$7,3,2+15 \mathrm{pp}^{* *}$
$6,4,2+8 \mathrm{pp}$

## 11

10, 8
10, 7
10, 6
10, 5

## Appendix IL: Complete list of scoring combinations using pool points, by score (cont.)

| A | A | A* | A ${ }^{\text {a }}$ | KQ* | KQ * | KQ* | KQ ${ }^{\text {a }}$ | KJ $\downarrow$ | KJ | KJ* | KJa | QJ ${ }^{\text {V }}$ | QJ * | QJ* | QJ ${ }_{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 93 | 75 | 60 | 40 | 75 | 60 | 45 | 30 | 53 | 40 | 28 | 13 | 45 | 30 | 19 | 8 |

## 11 cont <br> 10, 4

10, 3
10, 2
9, 7, 6 (NB. 7, 6=13)
9, 7, 5
9, 7, 4
9, 7, 3
9, 7, 2
9, 6, 5 (NB. 6, 5=11)
9, 6, 4
9, 6, 3
9, 6, 2
9, 5, 4
9, 5, 3
9, 5, 2
9, 4, 3
9, 4, 2
9, 3, 2
6, 5
$9,2+33 \mathrm{pp}^{* * *}$
$8,3+22 \mathrm{pp}^{* * *}$
$7,4+11 \mathrm{pp}^{*}$
$6,3,2+9 \mathrm{pp}$
$5,4,2+3 \mathrm{pp}$

## 10

10
9, 7
9, 6
8, 6, 5 (NB. 6, 5=11)
8, 6, 4
8, 6, 3
8, 6, 2
8, 5, 4
8, 5, 3
8, 5, 2
8, 4, 3
8, 4, 2
8, 3, 2
$8,2+25 \mathrm{pp}^{* * *}$
$7,3+15 \mathrm{pp}^{* *}$
$6,4+5 \mathrm{pp}$

## 9

9
8, 6
8, 5
8, 4
8, 3
8, 2

## 9 cont.

7, 5, 4 (NB. 5, 4=9)
7, 5, 3
7, 5, 2
7, 4, 3
7, 4, 2
7, 3, 2
5, 4
4, 3, 2
$7,2+18 \mathrm{pp}^{* *}$
$6,3+9 \mathrm{pp}$

## 8

8
7, 5
7, 4
7, 3
7, 2
6, 4, 3
6, 4, 2
6, 3, 2
$6,2+12 \mathrm{pp}^{*}$
$5,3+4 \mathrm{pp}$
7
7
6, 4
6, 3

## 7 cont.

6, 2
5, 4, 2
4, 3
$5,2+7 \mathrm{pp}$

## 6

6
5, 3
5, 2
$4,2+3 \mathrm{pp}$

## 5

5
4, 2
3, 2

## 4

4

## 3

3

## 2

2

* Not recommended for first half of tournament
** Not recommended until late in tournament
*** Not recommended until very late in tournament
When assessing these recommendations, the victory conditions should be taken into account. Some victory conditions (largest individual fish, first to catch a fish, etc) place a premium on good hands whenever they occur; players should take advantage of their opportunities in such cases.


Appendix III: Complete list of scoring combinations by pool expenditure


42 pool points***
$10,2+42 \mathrm{pp}=12$
39 pool points ${ }^{* * *}$
$10,3+39 \mathrm{pp}=13$
37 pool points ${ }^{* * *}$
$10,3,2=12+37 \mathrm{pp}$ $=15$

36 pool points***
$10,4,2+36 \mathrm{pp}=16$
35 pool points ${ }^{* * *}$
$10,5,2+35 \mathrm{pp}=17$
$10,4+35 \mathrm{pp}=14$
34 pool points ${ }^{* * *}$
$10,8,2+34 \mathrm{pp}=20$
$10,6,2+34 \mathrm{pp}=18$
33 pool points ${ }^{* * *}$
$10,9,2+33 \mathrm{pp}=21$
$10,7,2+33 \mathrm{pp}=19$
$10,4,3+33 \mathrm{pp}=17$
$9,2+33 \mathrm{pp}=11$
32 pool points***
$10,5,3+32 \mathrm{pp}=18$
31 pool points***
$10,8,3+31 \mathrm{pp}=21$
$10,7,3+31 \mathrm{pp}=20$
$10,6,3+31 \mathrm{pp}=19$
30 pool points***
$10,9,3+30 \mathrm{pp}=22$
$10,5+30 \mathrm{pp}=15$
$9,3,2=11+30 \mathrm{pp}=14$
$9,3+30 \mathrm{pp}=12$
29 pool points ${ }^{* * *}$
$9,4,2+29 \mathrm{pp}=15$

28 pool points***
$10,7,4+28 \mathrm{pp}=21$
$10,5,4+28 \mathrm{pp}=19$
$9,5,2+28 \mathrm{pp}=16$
27 pool points***
$10,8,4+27 \mathrm{pp}=22$
$10,6,4+27 \mathrm{pp}=20$
$9,6,2+27 \mathrm{pp}=17$
26 pool points***
$10,9,4+26 \mathrm{pp}=23$
$9,7,2+26 \mathrm{pp}=18$
$9,4,3+26 \mathrm{pp}=16$
$9,4+26 \mathrm{pp}=13$
25 pool points ${ }^{* * *}$
$9,8,2+25 \mathrm{pp}=20$
$9,5,3+25 \mathrm{pp}=17$
$8,2+25 \mathrm{pp}=10$
24 pool points ${ }^{* * *}$
$9,6,3+24 \mathrm{pp}=18$
$10,6+24 \mathrm{pp}=16$
23 pool points ${ }^{* * *}$
$10,7,5+23 \mathrm{pp}=22$
$9,7,3+23 \mathrm{pp}=19$
22 pool points***
$10,8,5+22 \mathrm{pp}=23$
$10,6,5+22 \mathrm{pp}=21$
$9,8,3+22 \mathrm{pp}=21$
$8,3+22 \mathrm{pp}=11$
2l pool points***
$10,9,5+21 \mathrm{pp}=24$
$9,5,4+21 \mathrm{pp}=18$
$9,5+21 \mathrm{pp}=14$
$8,4,2+21 \mathrm{pp}=14$
20 pool points
$9,6,4+20 \mathrm{pp}=19$
$8,5,2+20 \mathrm{pp}=15$

19 pool points ${ }^{* *} \quad$ Il pool points (cont).
$9,7,4+19 \mathrm{pp}=20$
$8,6,2+19 \mathrm{pp}=16$
18 pool points**
$9,8,4+18 \mathrm{pp}=22$
$8,7,2+18 \mathrm{pp}=17$
$8,4,3+18 \mathrm{pp}=15$
$8,4+18 \mathrm{pp}=12$
$7,2+18 \mathrm{pp}=9$

17 pool points**
$10,7,6+17 \mathrm{pp}=23$
$10,7+17 \mathrm{pp}=17$
$8,5,3+17 \mathrm{pp}=16$
16 pool points**
$10,8,6+16 \mathrm{pp}=24$
$8,6,3+16 \mathrm{pp}=17$
15 pool points**
$10,9,6+15 \mathrm{pp}=25$
$9,6,5+15 \mathrm{pp}=20$
$8,7,3+15 \mathrm{pp}=18$
$9,6+15 \mathrm{pp}=15$
$7,3,2=9+15 \mathrm{pp}=12$
$7,3+15 \mathrm{pp}=10$
14 pool points*
$9,7,5+14 \mathrm{pp}=21$
$7,4,2+14 \mathrm{pp}=13$
13 pool points*
$9,8,5+13 \mathrm{pp}=23$
$8,5,4+13 \mathrm{pp}=17$
$7,5,2+13 \mathrm{pp}=14$
$8,5+13 \mathrm{pp}=13$
12 pool points*
$8,6,4+12 \mathrm{pp}=18$
$7,6,2+12 \mathrm{pp}=15$
$6,2+12 \mathrm{pp}=8$
11 pool points*
$8,7,4+11 \mathrm{pp}=19$
$7,4,3+11 \mathrm{pp}=14$
$7,4+11 \mathrm{pp}=11$

## 10 pool points*

$7,5,3+10 \mathrm{pp}=15$

## 9 pool points

$10,8+9 \mathrm{pp}=18$
$10,8,7+9 \mathrm{pp}=25$
$7,6,3+9 \mathrm{pp}=16$
$6,3+9 \mathrm{pp}=9$
$6,3,2=8+9 \mathrm{pp}=11$

## 8 pool points

$10,9,7+8 \mathrm{pp}=26$
$9,7+8 \mathrm{pp}=16$
$9,7,6+8 \mathrm{pp}=22$
$6,4,2+8 \mathrm{pp}=12$

## 7 pool points

$9,8,6+7 \mathrm{pp}=24$
$8,6+7 \mathrm{pp}=14$
$8,6,5+7 \mathrm{pp}=19$
$6,5,2+7 \mathrm{pp}=13$
$5,2+7 \mathrm{pp}=7$
6 pool points
$8,7,5+6 \mathrm{pp}=20$
$7,5,4+6 \mathrm{pp}=16$
$7,5+6 \mathrm{pp}=12$

## 5 pool points

$7,6,4+5 \mathrm{pp}=17$
$6,4,3+5 \mathrm{pp}=13$
$6,4+5 \mathrm{pp}=10$
4 pool points
$6,5,3+4 \mathrm{pp}=14$
$5,3+4 \mathrm{pp}=8$
3 pool points
$5,4,2=7+3 \mathrm{pp}=11$
$4,2=5+3 \mathrm{pp}=6$


