

# NATIONAL MATHEMATICS PENTATHLON® ACADEMIC TOURNAMENT HIGHLIGHT SHEETS for DIVISION IV (Grades 6-7)

Highlights contain the most recent rule updates to the Mathematics Pentathlon® Tournament Rule Manual.

## DIVISION IV (Grades 6-7) Common Rules

<b>PENTATHLETE™ CODE OF CONDUCT</b>	A Pentathlete™ is to treat adults and fellow Pentathletes with courtesy and respect and play by the rules that they know to be true. Any infraction of this Code, including intimidation of an opponent or other forms of disruptive and/or uncooperative behavior, will be handled by the Tournament Director. Such infractions can result in 0 points and/or being required to leave the tournament site.
<b>ONE MINUTE TURNS</b>	Each Pentathlete is to complete a turn within one minute. If a player exceeds this time limit, the Monitor issues a reminder to take the turn immediately. If the player does not do so, the player forfeits that turn. The third violation of this rule results in a forfeiture of the game.
<b>FLAG CARD</b>	A player must be in possession of the flag card while taking a turn. The player does not have to be holding the flag card when completing a turn.
<b>SIGNING SCORE CARDS: THE OFFICIAL RECORD</b>	<b>The Score Card is THE ONLY Official Record of a Pentathlete's score.</b> After the game is complete, Pentathletes are to verify the information on their score card and sign their own score card. This signature means the information/score on the card was correctly recorded by the Monitor. Scores are also recorded on the Star and GM Record Sheet but are NOT the Official Record.
<b>DON'T CLEAR PLAYING AREA</b>	Do NOT clear the Gameboard, Pieces or Playing area until Scorecards have been collected, i.e. leave everything intact after a win is declared.
<b>STAYING SEATED</b>	Pentathletes are to remain seated at their game until their score cards are checked and picked up by a Game Leader.
<b>SCRATCH PAPER</b>	Scratch paper is provided for ALL games

## DIVISION IV (Grades 6-7) ~ CHALLENGING - OVERVIEW

<b>NO CHALLENGE START OF GAME, PASSING OF FLAG CARD, OR TIME</b>	Challenges can NOT be issued on the starting rules, passing of the flag card, or exceeding the one minute time limit. The Monitor oversees these issues.
<b>ANNOUNCING A CHALLENGE</b>	Players must challenge at the appropriate time. Time out is granted by the Game Monitor and the player must state the nature of the challenge before the Monitor rules Correct, Incorrect, or Inappropriate (see 2nd & 3rd opinions). <b><u>Once play has resumed, changes of prior game rulings will NOT be considered.</u></b>
<b>OPINIONS 2<sup>ND</sup> &amp; 3<sup>RD</sup></b>	<b>2nd &amp; 3rd Opinions:</b> After the <b>Game Monitor</b> has made a ruling, either Pentathlete "may" hold up the Opinion Card to ask for a 2nd ruling from the <b>Game Leader</b> . After the Game Leader has ruled, either Pentathlete may then ask for a 3rd and <b>FINAL OPINION</b> from the <b>Tournament Director</b> .
<b>INVOLVING MORE THAN ONE RULE</b>	If a challenge situation involves more than one rule, each challenged rule is treated as a separate challenge. Each challenge is ruled on in the order announced by the player.
<b>CHALLENGING A DECLARED WIN</b>	A player may challenge a declared win without being in possession of the flag card. In doing so, the Monitor asks the player to state the nature of the challenge. If <b>CORRECT</b> , a win is granted to the challenger. If <b>INCORRECT</b> , the declared win is confirmed. This applies to declaring a win with regard to the <u>intended goal</u> of the game. <b>EXAMPLE:</b> Prime Gold - Player declares a win based on 3 veins of Prime Gold and is challenged by the opponent, the opponent would be declared the winner. <b>IN CONTRAST:</b> If a player places a chip to construct the fourth vein based on an incorrect number sentence that results in what looks to be a winning situation, declares a win and is challenged, the official would allow play to continue after ruling a correct challenge to an incorrect number sentence and assessing penalty.
<b>THREE "I", "IA", OR COMBINATION OF "I'S &amp; "IA", IS AN AUTOMATIC LOSS</b>	Three incorrect and/or inappropriate challenges, whether consecutive or not, result in a forfeiture of the game. The Monitor keeps record of the challenges on the Game Monitor Record Sheet. Once three have been obtained the Monitor stops the game and declares the winner. Monitors may warn Pentathletes of this rule after they receive their first and second "I" or "IA".

# Pent 'Em In™ Tournament Highlights

<b>GOAL</b>	<p>1) A player can win when all of the OPPONENT'S 5 pentominoes are entrapped.</p> <p>2) During PLACEMENT: A player wins when the opponent can NOT place 5 pentominoes onto gameboard.</p> <p>3) During MOVEMENT: A player wins for correctly challenging the opponent for moving the same pentomino three consecutive times, even if interspersed with chip movement.</p> <p>NOTE: Game Monitor can award a win to a player when the opponent can not make a legal move.</p>
<b>START</b>	Monitor puts a chip of one color in one hand and chip of different color in another. Ask one player to determine what the starting color will be and ask the other player to pick a hand. Player who has starting color receives the flag card and play begins.
<b>BEGINNING OF TURN</b>	when player receives the Movement Record Flag Card
<b>END OF TURN</b>	when player passes the Movement Record Flag Card to opponent
<b>DECLARING A WIN</b>	A player must announce a win while in possession of the flag card.
<b>NOT A ROUND GAME EXCEPT GAME TIME LIMIT</b>	The first player to reach the goal of game wins. If the game has not ended when time is called and the beginning player has touched a piece, both players are allowed to complete a turn.
<b>GAME TIME LIMIT MONITOR DECLARES</b>	If time is called and neither player has won, the Game Monitor declares a TIE.

## OTHER RULES ~ Pent 'Em In™

<b>PHASE I: INITIAL PLACEMENT</b>	The Game Monitor assures that each player has placed exactly 5 pentominoes onto the gameboard. No sixth pentomino is allowed to be placed. No pentomino may be placed over the squares with sheriff stars on the gameboard. Also, a pentomino may NOT be placed so that it shares a common edge with the opponent's pentomino. (If a player PICKS UP a piece and cannot place it, another piece may be selected. If a player has already PLACED a piece, it CANNOT be changed. If a player cannot place a pentomino, the player forfeits the game.)
<b>PHASE II: MOVEMENT OF PENTOMINOES &amp; CHIPS</b>	<p><b>PENTOMINOES:</b> Pentominoes may now be moved so that they share a common edge with the opponent's pentominoes. A pentomino may be slid, flipped, OR rotated, but no combinations of these movements can be made within a turn. Pentomino pieces may be flipped or rotated over chips, Sheriff Stars, or parts of another pentomino. They may NOT be slid over spaces occupied by chips or pentominoes or over the gameboard's Sheriff Stars.</p> <p><b>CHIPS:</b> After the Placement Phase, chips may be moved. A chip may NOT be slid through or placed on the Sheriff Stars.</p>
<b>TRACKING MOVEMENT</b>	In Phase II, Pentathletes MUST keep track of movement on the Movement Record Flag Card.
<b>LAI D IS PLAYED &amp; MOVE IT-USE IT</b>	Once a player places or moves a piece and releases hold of it, the piece may not be repositioned. If a player has moved a piece off of it's space, that piece must be moved to complete a turn.
<b>BOOTS &amp; HATS</b>	Playing pieces may be moved into or through unoccupied boot and hat spaces.
<b>NO 3 CONSECUTIVE MOVES OF THE SAME PENTOMINO</b>	A player may NOT move the same pentomino 3 consecutive times, even if interspersed with a chip movement. NOTE: Being challenged results in loss of game.
<b>NO CONSECUTIVE CHIP MOVEMENTS ALLOWED</b>	A player may NOT make 2 consecutive chip movements. If a chip has been moved during one turn, the player must move a pentomino in the next move. Note: If challenged see Correct Challenge (Other Challenges).

## CHALLENGING ~ Pent 'Em In™

<b>WHEN TO CHALLENGE</b>	upon receiving the flag card and before touching a pentomino or chip
<b>CORRECT - "C"</b>	<p><b>Initial Placement:</b> Game Monitor removes placed piece and challenger selects and places an opponent's piece correctly.</p> <p><b>If a Pentomino can not be placed:</b> Game Monitor declares the win.</p> <p><b>3 Consecutive Same Pentomino Moves:</b> Game Monitor declares the win when challenged.</p> <p><b>Other Challenges:</b> The Game Monitor restores the board to prior status and challenger EITHER begins a turn OR forces the opponent to move a pentomino.</p> <p>NOTE: Record "C" on Challenge Sheet</p>
<b>INCORRECT - "I"</b>	<p><b>Initial Placement:</b> Challenged player may move one of the opponent's chips to a new location and challenger begins a turn.</p> <p><b>Other Challenges:</b> Challenger either loses turn OR is forced to move by challenged player - Record "I" on Challenge Sheet.</p> <p><i>Any combination of 3 "I"s and/or "IA"s results in a loss that is declared by the Monitor.</i></p>
<b>INAPPROPRIATE - "IA"</b>	An Inappropriate Challenge is one that is made at the wrong time or is about a procedure that is not a tournament rule. Such a challenge DOES NOT result in loss of turn, but is recorded as an "IA" on the Record Sheet. <i>Any combination of 3 "I"s and/or "IA"s results in a loss that is declared by the Monitor.</i>

**Pent 'Em In™  
Movement Record Flag Card**

Player A - Name	Player B - Name

**Pentomino & Chip Legend**

I L L C U Z F Y P T W X O  
I L V U S Z F Y P T W X O

**Pent 'Em In™  
Movement Record Flag Card**

Player A - Name	Player B - Name

**Pentomino & Chip Legend**

I L L C U Z F Y P T W X O  
I L V U S Z F Y P T W X O

# FRAC FACT™ Tournament Highlights

<b>GOAL</b>	To acquire the greater number of 3-strip tricks for each game in a <b>3 game series</b> . 2 WAYS TO WIN - Win 2 out of 3 games, OR win 1 game and tie 2 games.
<b>REMOVE</b>	One copy of zero strips & whole strips (10 strips) are removed to make this a more challenging game.
<b>START</b>	Both players draw a strip from top of Draw Pile. Lower value begins. Strips are inserted back into the Draw Pile, then the starting player places the top two strips in the Red Result Rectangles outlined in red, then <b>alternates dealing</b> out 5 strips to each player which are placed face up on the player's rectangles outlined in blue, places the stack back on the Draw Pile, and the starting player begins a turn. Players alternate being the beginning player in sequential games.
<b>BEGINNING OF TURN</b>	when player receives the flag card NOTE: For a CAPTURE, a player's regular turn begins after a player replenishes the 3 strips.
<b>END OF TURN</b>	when player passes the flag card to opponent
<b>DECLARING A WIN</b>	The Monitor declares a win or tie for each game by subtracting the number of strips in the Discard Pile from the strips acquired in the Scoring Pile. The player with the greater difference wins. If both players have the same difference, a TIE is declared. The Monitor also awards the overall win/tie.
<b>END OF EACH GAME</b>	when the Center Red Result Rectangles are empty OR when the Draw Pile is empty and neither player can form a trick with the strips in the Center Red Result Rectangles.
<b>NOT A ROUND GAME EXCEPT GAME TIME LIMIT</b>	If the game has not ended when time is called and the beginning player has touched a strip to form trick, both players are allowed to complete a turn.
<b>GAME TIME LIMIT MONITOR DECLARES</b>	Note: If a game has not been completed, the player with the greater difference is declared the winner for that game. WIN: Monitor declares win if a player wins 2 out of three games OR wins 1 and ties 2. TIE: If each player has won 1 game and tied 1 game OR tied all 3 games, the Monitor declares a tie.

## OTHER RULES ~ FRAC FACT™

<b>PAPER/PENCIL LIMITED USE</b>	Paper and pencil may ONLY be used for the operations of MULTIPLICATION and DIVISION.
<b>MAKING A TRICK TOUCH AND ANNOUNCE BEFORE PICKING UP</b>	Player MUST do this in the following order: 1) announce the arithmetic sentence EITHER after the 3 strips are touched OR while the 3 strips are being touched. 2) pick up the 3 strips and place them into a Scoring Pile to the RIGHT of the player. 3) draws 3 strips from top of Draw Pile and chooses 2 strips to replenish hand and the 3rd strip onto the open Red Result Rectangle.
<b>EQUIVALENT FRACTIONS CAN BE STATED</b>	Equivalent expressions for the fractions strips may be used, but are limited to the partitions of the fractions strips used in the game. For example, the 2/6 strip could also be referred to as 1/3 or 4/12. The terms one, & zero may be used.
<b>TOUCH-TAKE</b>	Once one of the player's 5 strips has been touched, it must be used to form a trick.
<b>DISCARDING &amp; REPLENISHING OPTION</b>	In the first 30 seconds of a turn a player has the option to discard and replenish from 1 to all 5 of the player's strips. These strips are placed in a Discard Pile to the LEFT of the player.
<b>PASSING A TURN</b>	When unable to form a trick, a player may pass the flag card to the opponent and end the turn.
<b>FORCED DISCARD</b>	Should an opponent pass a turn (see above) without using the Discarding and Replenishing Option, a player may issue a Forced Discard by passing the flag card back to the opponent. This forces the opponent to replenish and discard at least one strip. The opponent may then proceed to take a turn and attempt to make a trick. <u>A player can not issue a forced discard after a player has discarded and replenished.</u> NOTE: If a player can form a trick, but instead issues a force discard, the opponent can capture.
<b>CAPTURE</b>	Within 10 seconds after receiving the flag card and before touching a strip a player may announce "Capture" or "Challenge" and capture a trick that was not detected by the opposing player. After using the Touch & Announce rule and capturing the trick, the player draws 3 bars ( and chooses 2 to replenish the opponent's hand and one for the center of the board). The player then begins a regular turn..

## CHALLENGING ~ FRAC FACT™

<b>WHEN TO CHALLENGE</b>	upon receiving the flag card and before touching a fraction strip CAPTURE: BEFORE the challenged player replenishes the 3 strips to begin the regular part of the turn.
<b>CORRECT - "C"</b>	The strip(s) removed are awarded to challenger and the challenger begins a regular turn. NOTE: When challenging an arithmetic sentence, the challenger does not have to state the correct sentence. Record "C" on Challenge Sheet <u>Challenging a CAPTURE:</u> challenger gets trick and challenger begins a regular turn <u>Challenge TOUCH-TAKE:</u> challenger receives an additional turn <u>Challenge for NOT REPLENISHING 3 strips:</u> challenger replenishes 3 strips. <u>Challenge FORCE DISCARD:</u> challenger removes 3 strips from hand and gives strips to OPPONENT to place in opponent's discard pile. Challenger then replenishes hand and takes a regular turn. Opponent can not issue Force Discard after replenishment.
<b>INCORRECT - "I"</b>	The challenger forfeits a turn. Record "I" on Record Sheet. <b>CHALLENGING A CAPTURE:</b> The challenged player gets an additional turn after completing a regular turn. <u>Challenge FORCE DISCARD:</u> challenger discards 3 strips, replenishes and takes a regular turn. Record "I" <i>Any combination of 3 "I"s and/or "IA"s results in a loss for up to 3 games that are allowed to be played in this event. (declared by the Monitor)</i>
<b>INAPPROPRIATE - "IA"</b>	An Inappropriate Challenge is one that is made at the wrong time or is about a procedure that is not a tournament rule. Such a challenge DOES NOT result in loss of turn, but is recorded as an "IA" on the Record Sheet. <i>Any combination of 3 "I"s and/or "IA"s results in a loss for up to 3 games that are allowed to be played in this event. (declared by the Monitor)</i>

# Fraction Pinball™ Tournament Highlights


<b>GOAL</b>	A player may win based on any of the following conditions: a) being the first to OBTAIN & IDENTIFY an accumulated score between 4.95 and 5.05; b) the opponent's pinballs are trapped and the opponent is unable to untrap either of their pinballs for movement; c) at the beginning of a turn and before touching a piece the score is between 4.95 and 5.05 and the opponent has not declared a win; or d) at the beginning of a turn and before touching a piece the score is less than 1.5 or greater than 8.5 in Phase III.
<b>START</b>	Blue is the designated starting color. A player picks up a pawn of each color and places one in each hand, out of view of the opponent. Opposing player selects a hand. Player who has starting blue pawn receives the Accumulated Score Flag Card and play begins.
<b>BEGINNING OF TURN</b>	when player receives the Accumulated Score Flag Card.
<b>END OF TURN</b>	when the player passes the Accumulated Score Flag Card
<b>DECLARING A WIN</b>	A player must announce a win while in possession of the Accumulated Score Flag Card.
<b>GAME TIME LIMIT MONITOR DECLARES</b>	If time is called and the starting player has moved a piece, a round is allowed to be completed. TIE: If neither player has won, a tie is declared.

## OTHER RULES ~ Fraction Pinball™

<b>PHASE I: PINBALL PLACEMENT</b>	After pinball lands onto the first positive fraction circle, a player: 1) states the decimal equivalent of the fraction (see Note); 2) records and adds this value to the accumulated score on the Accumulated Score Flag Card; 3) announces the new accumulated score; and 4) passes the Accumulated Score Flag Card to opponent to end the turn. Pinballs may not enter negative fraction circles in this phase. <b>NOTE: If a player lands on the Fraction Circle 1/2, player can state "Point 5" or "Five Tenths".</b>
<b>PHASE II: CHIP PLACEMENT</b>	Only blocking chips are placed on Nodes and cannot be moved a second time. Pinballs cannot be moved in this phase. Neutralization is NOT allowed in Phase II.
<b>PHASE III: MOVEMENT</b>	Player can move a pinball or blocking chip according to same procedures used in Phases I and II. <b>Pinballs may now enter negative fraction circles.</b>
<b>NEUTRALIZATION OF BLOCKING CHIPS</b>	During Phase III a player may neutralize an opponent's blocking chip by moving one of the player's blocking chips along a path containing 1 or more fraction circles before arriving at a Node occupied by an opponent's blocking chip. The player's chip is placed on top of the opponent's chip. A player may choose to leave the stack of 2 chips on that Node OR pick up and move the stack of chips to the CAPTIVE PENTAGON provided no other chip(s) occupy that position. <u>No more than 2 chips may be stacked on any Node or the Captive Pentagon.</u> (The blocking chip may NOT be moved directly from one Node (or the Captive Pentagon) to another to neutralize an opponent's chip.) Note: <u>Only the top blocking chip of a neutralized stack may be moved within a turn.</u>
<b>CENTER STAR</b>	A player may NOT change the direction of movement of a pinball or blocking chip at the Center Star.
<b>MOVE IT-USE IT &amp; LAID IS PLAYED</b>	If a player has moved a piece off of it's space, that piece must be moved to complete a turn. Once a player moves a piece and releases hold of it, the piece may not be repositioned.

## CHALLENGING ~ Fraction Pinball™

<b>WHEN TO CHALLENGE</b>	upon receiving the Accumulated Score Flag Card and before touching a piece
<b>CORRECT - "C"</b>	1) The Game Monitor restores gameboard and score (if changed) to prior status. 2) The challenger must take the opponent's turn in Phase I & II, but in Phase III the player has the option of taking the opponent's turn or forcing the opponent to take a turn. 3) The challenger then completes a regular turn. Record "C" on Challenge Sheet
<b>INCORRECT - "I"</b>	In all 3 Phases the challenged player takes the opponent's turn and then takes a regular turn. <i>Any combination of 3 "I"s and/or "IA"s results in a loss that is declared by the Monitor.</i>
<b>INAPPROPRIATE - "IA"</b>	An Inappropriate Challenge is one that is made at the wrong time or is about a procedure that is not a tournament rule. Such a challenge DOES NOT result in loss of turn, but is recorded as an "IA" on the Record Sheet. <i>Any combination of 3 "I"s and/or "IA"s results in a loss that is declared by the Monitor.</i>



# Prime Gold™ Tournament Highlights

<b>GOAL</b>	A player must be the only player at the end of a round who has: 1) constructed one continuous path of chips from top to bottom or from side to side of the gameboard OR; 2) mined 4 veins of Prime Gold (4 veins of 3 or more chips covering prime numbers in a contiguous diagonal line). Note: Extending veins on a diagonal line can only be counted as one (1) vein. However, any chip in a vein can be used to form another intersecting diagonal vein.
<b>START</b>	Players each toss one of the ICOSAHEDRA dice (a 20 sided die). The player with the lower value begins.
<b>BEGINNING OF TURN</b>	when player receives the Equation Flag Card
<b>END OF TURN</b>	when player passes the Equation Flag Card to the opponent
<b>END OF GAME</b>	when a player receives the Equation Flag Card and has no chips to play
<b>DECLARING A WIN</b>	A player must announce a win before releasing the Equation Flag Card. If the beginning player announces a win, the second player is allowed to complete the round. If both players construct a win and properly announce it, the Monitor declares a TIE.
<b>ROUND GAME</b>	YES ~ consists of the beginning and second player completing a turn
<b>GAME TIME LIMIT MONITOR DECLARES</b>	If time is called and the starting player has rolled the dice, a round is allowed to be completed. If neither player has won, the Game Monitor declares a TIE.

## OTHER RULES ~ Prime Gold™

<b>CALCULATOR USAGE</b>	Non-programmable calculators may be used if each Pentathlete has one. If one player chooses <u>not</u> to use a calculator, the opposing player may not make use of a calculator.
<b>WRITING THE NUMBER SENTENCE</b>	A player <b>MUST WRITE</b> the number sentence on the Equation Flag Card before completing a turn. <b>The Order of Operations must be used.</b> (The operations of multiplication and division precede the operations of addition and subtraction.) E.g.: if a 2, 5, and 6 were rolled many possible number sentences could be written such as $2 \times 5 + 6 = 16$ , or $(2 + 5) \times 6 = 42$ , or 5 to the 2nd power - $6 = 19$ , or $(6 - 5) 2 = 2$ . <b>Note:</b> Players do NOT have to announce their number sentence.
<b>ANNOUNCING GOLDBACH'S DOUBLE PRIME PLACEMENT</b>	In addition to writing the number sentence, the player <b>MUST ANNOUNCE</b> the 2 prime numbers that add up to the result constructed with the dice <b>BEFORE</b> completing a turn.
<b>LAI D IS PLAYED</b>	Once a chip is laid it can not be repositioned
<b>PASSING A TURN</b>	If a player is unable to place a chip within the 1 minute time limit, the player passes the Equation Flag Card to end the turn.
<b>PRIME GOLD VEINS</b> MUST have ample chips on bases to exercise this rule	<b>VEIN of 3:</b> 1 chip may be removed from composite number - chip returned to the opponent <b>VEIN of 4:</b> 2 chips may be removed from composite numbers AND 2 of players chips may be placed onto the composite numbers that were covered by removed chips - removed chips returned to the opponent <b>VEIN of 5:</b> same as vein of 4 but one chip which covering a prime number may be removed and return this chip to opponent
<b>SHAFTS</b> (5 or more chips)	<b>SHAFTS of 5:</b> ANY 2 OR FEWER of opponent's chips MAY be removed - chips returned to the opponent <b>SHAFTS of 6 or more:</b> ANY 3 OR FEWER of opponents chips MAY be removed - chips returned to the opponent
<b>PRIME NUMBERS</b>	Numbers other than 0 or 1 that can only be divided by 1 or the number itself: 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, 97, 101, 103, 107, 109, 113
<b>COMPOSITE NUMBERS</b>	Can be divided by a number other than 1 and itself. NOTE: 1 is neither prime nor composite.
<b>FACTORIALS</b>	Factorials such as $3!$ or $5!$ equate to $3 \times 2 \times 1$ and $5 \times 4 \times 3 \times 2 \times 1$ , respectively. By definition, $0!$ is equal to 1. $0! = 1$ , $1! = 1$ , $2! = 2$ , $3! = 6$ , $4! = 24$ , $5! = 120$ , $6! = 720$ , $7! = 5,040$ , and so on

## CHALLENGING ~ Prime Gold™

<b>WHEN TO CHALLENGE</b>	upon receiving the Equation Flag Card and before rolling the dice
<b>CORRECT - "C"</b>	The Game Monitor returns board to prior status and the challenger begins a turn. Record "C" on Challenge Sheet
<b>INCORRECT - "I"</b>	The challenger forfeits a turn. Record "I" on Record Sheet. <i>Any combination of 3 "I"s and/or "IA"s results in a loss that is declared by the Monitor.</i>
<b>INAPPROPRIATE - "IA"</b>	An Inappropriate Challenge is one that is made at the wrong time or is about a procedure that is not a tournament rule. Such a challenge DOES NOT result in loss of turn, but is recorded as an "IA" on the Record Sheet. <i>Any combination of 3 "I"s and/or "IA"s results in a loss that is declared by the Monitor.</i>



# Prime Gold™

## Equation Flag Card



Player A - Name	Player B - Name



# Prime Gold™

## Equation Flag Card



Player A - Name	Player B - Name



# Remainder Islands™ Tournament Highlights

<b>GOAL</b>	The player having the greater number of chips when the game has ended wins the game. <b>THE MONITOR COUNTS THE CHIPS AND ANNOUNCES THE WIN.</b>
<b>START</b>	Players each toss a dodecahedron die (12 sided). The player with the lower value begins.
<b>BEGINNING OF TURN</b>	when player receives the flag card
<b>END OF TURN</b>	when player passes the flag card to the opponent
<b>END OF GAME</b>	When a player has chips on all 6 islands and the second player has been allowed to complete the Round the Game Monitor announces the end of game AND declares the winner based on the greater number of chips.
<b>ROUND GAME</b>	YES ~ consists of the beginning and second player completing a turn
<b>GAME TIME LIMIT MONITOR DECLARES</b>	If time is called and the starting player has rolled the dice, a round is allowed to be completed. WIN: The player with the greater number of chips is declared the winner by the Game Monitor. TIE: If both player's have the same number of chips, the Game Monitor declares the tie OR if both players use all 40 chips without ending the game.
<b>OTHER RULES ~ Remainder Islands™</b>	
<b>CALCULATOR USAGE</b>	Non-programmable calculators may be used if each Pentathlete has one. If one player chooses not to use a calculator, the opposing player may not make use of a calculator.
<b>ANNOUNCING NUMBER SENTENCE</b>	The player must announce the dividend, divisor, quotient, and remainder of the chosen division problem before moving Pawn or removing chips. (Example: "24 divided by 9 is 2 with a remainder of 6", or "24 divided by 6 is 4 with a remainder of 0")
<b>PASSING A TURN</b>	If a player is unable or does not wish to move, the player passes the flag card to end the turn.
<b>PAWN MOVEMENT LAID IS PLAYED</b>	Before moving a the pawn a player <b>MUST POINT</b> and <b>COUNT ALOUD</b> for the opponent to hear, the triangles that compose the path for the pawn. The pawn then can be placed on the last triangular space. Once pawn is laid it cannot be repositioned. Note: Whenever a remainder is obtained, a player <b>MUST</b> land on a triangular space adjoining an island (docking).
<b>ZERO REMAINDER OPTIONS</b>	If the quotient is 1 or greater with a remainder of zero, the player may choose <b>ONE</b> of the following options: 1) the player's pawn may be moved and it does not have to land on a triangular space adjoining an island; 2) the opponent's pawn may be moved and it does not have to land on a triangular space adjoining an island; OR 3) the opponent's chip(s) may be removed from any <b>ONE</b> island based on the following conditions: a) quotient is 1-19: 1 chip may be removed; b) quotient is 20-29: *exactly 2 chips may be removed; or c) if quotient is 30 or more: *exactly 3 chips may be removed. * All chips must be removed from the same island, the opposing player must have at least the number of specified chips on an island, and <b>the removed chip(s) are returned to the opponent</b>
<b>SPINNING OFF OF MULTIPLES OF 6</b>	Player <b>MUST ANNOUNCE</b> and count by multiples of 6. Example: quotient of 28 player might count: 1, 2, <b>8, 14, 20, 26, 27, 28</b>
<b>ZERO QUOTIENT WITH NON-ZERO REMAINDER</b>	If a player's pawn is on a triangle adjacent to an island that does <b>NOT</b> contain any of the player's chips and if the player constructs a division problem with a quotient of zero and a non-zero remainder, the player may move zero and deposit the number of chips indicated by the remainder. EXAMPLE: $7 \div 8 = 0 R7$ OR 7 divided by 8 equals a quotient of 0 with a remainder of 7
<b>REMOVED CHIPS</b>	Removed chips are returned to the opponent.
<b>DEPLETED CHIPS</b>	If all 40 of a player's chips have been played and the player still has islands without chips, play continues. (uses Zero Remainder Option)
<b>CHALLENGING ~ Remainder Islands™</b>	
<b>WHEN TO CHALLENGE</b>	upon receiving the flag card and before rolling the dice
<b>CORRECT - "C"</b>	The Game Monitor returns board to prior status and the challenger removes 3 or fewer of the opponent's chips from a selected island, returns them to the opponent, and challenger begins a turn. Record "C" on Challenge Sheet
<b>INCORRECT - "I"</b>	The challenged player removes 3 or fewer of the challenger's chips from a selected island, returns them to the challenger, and the challenger forfeits a turn and passes the flag card to the challenged player. Record "I" on Record Sheet. <i>Any combination of 3 "I"s and/or "IA"s results in a loss that is declared by the Monitor.</i>
<b>INAPPROPRIATE - "IA"</b>	An Inappropriate Challenge is one that is made at the wrong time or is about a procedure that is not a tournament rule. Such a challenge <b>DOES NOT</b> result in loss of turn, but is recorded as an "IA" on the Record Sheet. <i>Any combination of 3 "I"s and/or "IA"s results in a loss that is declared by the Monitor.</i>