Chance It! Directions: Draw 2 cards, multiply, score.   Name: _____

Upper Section	How to Score	Polynomial	Score
Coefficient of min. value	Enter the value of the coefficient with the smallest value. (could be negative)		
Coefficient of max. value	Enter the value of the coefficient with the largest value.		
Degree of **term** with coefficient of maximum value	Enter the degree of the **term** that has the coefficient of maximum value.		
Sum of Coefficients	Enter the sum of the coefficients.		
Degree of Polynomial	Enter the degree of the polynomial.		
Total Score	➡		
Bonus	20 point bonus if total is 30 or over		
Total of Upper Section	➡		

Lower Section

Monomial	Score 10 points (or 0)		
Binomial	Score 20 points (or 0)		
Trinomial	Score 30 points (or 0)		
Difference of max. and min. value coefficients	Enter the difference of the max. and min. value coefficients.		
Constant term	Enter the value of the constant term. (or 0)		
Total of Lower Section	➡		
Total of Upper Section	➡		
Grand Total	➡		

Chance It! Instruction Sheet

The game consists of 10 rounds. In each round you draw two cards, multiply the polynomials on the two cards, and then score in one of the 10 categories. You **must** score in each category – which means that you may have to settle for scoring zero in some categories. The score is determined by a different rule for each category (see the sample score sheet below for examples). The objective of the game is to maximize your total score. The game ends once all 10 categories have been scored.

Upper Section	How to Score	Polynomial	Score
Coefficient of min. value	Enter the value of the coefficient with the smallest value. (could be negative)	$36y + \mathbf{32}y^2 + 45yz + 40z^2$	32
Coefficient of max. value	Enter the value of the coefficient with the largest value.	$15x^2y + \mathbf{25}x^2y$	25
Degree of **term** with coefficient of maximum value	Enter the degree of the **term** that has the coefficient of maximum value.	$4x^5 + \mathbf{18}x^4 + 2x + 12$	4
Sum of Coefficients	Enter the sum of the coefficients.	$\mathbf{3}x^4 + \mathbf{9}y^4$	12
Degree of Polynomial	Enter the degree of the polynomial.	$3x^5 + 6\mathbf{x^4}$	4
Total Score	⟶		77
Bonus	20 point bonus if total is 30 or over		20
Total of Upper Section	⟶		97

Lower Section

Monomial	Score 10 points (or 0)	$24x^3yz^3m^3$	10
Binomial	Score 20 points (or 0)	$-4xy^2 + 4y^2$	20
Trinomial	Score 30 points (or 0)	$4xy - 4x - 8y$	30
Difference of max. and min. value coefficients	Enter the difference of the max. and min. value coefficients.	$x^2 + 2x - 3$	5
Constant term	Enter the value of the constant term. (or 0)	$10x^3 + 8x^2 + 15x + 12$	12
Total of Lower Section	⟶		77
Total of Upper Section	⟶		97
Grand Total	⟶		174

$2x^2$	$3x^4$
$5x^2y$	$7x^3y^2$
$7m^4$	$-8m^3$
$-3xy^4$	$5x^4y^5$

$3y$	$5y^3$
$-2y^3$	$2x^2y^3$
$-3x^2yz^3$	$\dfrac{2}{3}b$
$15b^3$	$-2b^2$

$\dfrac{4}{9}x^2y^3$	$-\dfrac{3}{2}x^4y^2$
$-4y^2$	$3y - 4$
$5x^2$	$3x^4 + 2$
$2x^2$	$3x^2 + 7x + 5$

$3x^4$	$2x^3 + 7x - 6$
$4x^2y^3$	$-2xy^4 + 7xy^2 + 3$
$2xy^2$	$5x^3y^2 - 2xy + 5$
$0.2x$	$10x^3y^2 + 6xy^3 - 20$

$-0.3a^2b^2$	$9ab^3 + 6a^2b - 1$
$0.3x^2y^3$	$9x^4y - 4x^2y^3 + 5xy$
$4.6m^3n$	$1.3m^4n^2 - 2.6mn^2 + 5n^4$
$-0.4c^2d^3$	$8c^3d^2 + 7cd^2 - 5d^4$

$0.6x^3y^2$	$8x^2y - 2.6xy^3 + 5.9y^5$
$3x + 2$	$3x^2 + 5x - 4$
$2u - 3$	$u^2 - 3u + 2$
$3y + 5$	$y^2 - 5y + 7$

$4t^2 + 7$	$t^3 + 5t - 1$
$2u^2 - 3$	$2u^2 - 2u + 4$
$x^2 + 3$	$x^2 - 2x + 5$
$3x - 2$	$3x^2 - 5x + 4$

$x^2 + 3$	$x^2 - 2x + 5$
$x - 2y$	$x^2 - 3xy - y^2$
$m^2 + 3$	$m^3 + 2m^2 - 3m + 4$
$4 - x^2$	$x^4 - 2x^2 - 3x + 4$

$y^2 - 5y + 3$	$y^2 + 2y + 3$
$u^2 - 2u + 5$	$u^2 + 3u + 1$
$x^2 + 2x - 2$	$x^3 - 3x^2 + 3$
$2t^2 - 5t + 1$	$t^3 - t^2 + t - 3$

$3x^2 - 5$	$-2x^2 + 3$
$2x^2 + 3$	$-x^2 + 4x - 1$
$x + 1$	$x + 2$
$x - 1$	$x - 2$

$x + 3$	$x + 4$
$x - 3$	$x - 4$
$x + 5$	$x - 3$
$x - 5$	$x + 3$

$x - 6$	$x + 2$
$x + 6$	$x - 2$
$5x + 4$	$x - 1$
$5x - 4y$	$x + y$

$3x + 2$	$2x - 4$
$3x - 2y$	$2x + 4y$
$2x^2 + 3$	$5x^2 - 1$
$x^2 + y^3$	$x^3 - y$

$0.4x + 3y$	$2x - 0.5y$
$3.2t - 0.4s$	$0.5t - 3.2s$
$\dfrac{x}{3} + 4y$	$3x - \dfrac{y}{4}$
$\dfrac{x}{5} - 3y$	$\dfrac{x}{2} + 5y$

$w - 7$	$w + 7$
$7 - w$	$7 + w$
$2m - 9$	$2m + 9$
$9 + 2m$	$9 - 2m$

$4y^2 + 5z$	$4y^2 - 5z$
$9y + 8z$	$9y - 8z$
$x + y$	$x - y$
$x^2 - xy + y^2$	$x^2 + xy + y^2$

$x - 2y$	$x + 2y$
$x^2 + 2xy + 4y^2$	$x^2 - 2xy + 4y^2$
$3x - \dfrac{1}{4}$	$3x + \dfrac{1}{4}$
$7x - \dfrac{3}{7}$	$7x + \dfrac{3}{7}$