

The Factor Game

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30

The Factor Game Rules

1. Player A chooses a number on the game board and circles it.
2. Player B circles all the proper factors of Player A's number.
3. After Player B's turn is complete, Player A can "steal" any factor that Player B missed by circling it.
4. Players take turns choosing numbers and circling factors.
5. The game ends when there are no numbers remaining on the board with uncircled factors.

Factor Game Scoring

1. Player A scores points equal to the number selected. If that number has no factors left on the board that are not circled, Player A loses a turn and scores 0 points.
2. Player B scores points equal to the sum of the factors circled in this turn.
3. Player A scores points equal to the sum of the factors "stolen"

The Polynomial Factor Game

$x - 1$	$x^2 - 1$	$x^3 - 1$	$x^4 - 1$	$x^5 - 1$
$x^6 - 1$	$x^7 - 1$	$x^8 - 1$	$x^9 - 1$	$x^{10} - 1$
$x^{11} - 1$	$x^{12} - 1$	$x^{13} - 1$	$x^{14} - 1$	$x^{15} - 1$
$x^{16} - 1$	$x^{17} - 1$	$x^{18} - 1$	$x^{19} - 1$	$x^{20} - 1$
$x^{21} - 1$	$x^{22} - 1$	$x^{23} - 1$	$x^{24} - 1$	$x^{25} - 1$
$x^{26} - 1$	$x^{27} - 1$	$x^{28} - 1$	$x^{29} - 1$	$x^{30} - 1$

The Factor Game Rules

1. Player A chooses a polynomial on the game board and circles it.
2. Player B circles all polynomials that are proper factors of Player A's polynomial.
3. After Player B's turn is complete, Player A can "steal" any factor that Player B missed by circling it.
4. Players take turns choosing polynomials and circling factors.
5. The game ends when there are no polynomials remaining on the board with uncircled factors.

Factor Game Scoring

1. Player A scores points equal to the degree of the polynomial selected. If that polynomial has no factors left on the board that are not circled, Player A loses a turn and scores 0 points.
2. Player B scores points equal to the sum of the degrees of the factors circled in this turn.
3. Player A scores points equal to the sum of the degrees of the factors "stolen" in this turn.