

Example Factor Game

TI-30XB MultiView™: Factor Game

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The winner of this game is the one with the most number of points.

Players take it in turns to choose a number.

The player whose turn it is receives the number of points equal to the number they chose.

The opponent is also awarded points equal to the sum of all of the factors of the chosen number.

The example below shows how this works:

Amy is Player One and chooses the number 20

(20 has factors: 1, 2, 4, 5, 10)

Her points from her turn are therefore 20

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

Jayson is Player Two he gets the sum of all of the

factors of Amy's chosen number

$$\dots 1 + 2 + 4 + 5 + 10 = 22$$

His points from Amy's turn are therefore 22

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

It is now Jayson's turn, note that all the previously used factor squares are now out of play.

Jayson chooses 18

(18 has factors 1, 2, 3, 6, 9)

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

Amy gets $3 + 6 + 9 = 18$

She does not get factors 1 and 2 as points as they have already been used

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

Amy now has 38 points: 20 points from round one and 18 from round two.

Jayson now has 40 points: 22 points from round one and 18 from round two.

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Additional Rules:

- If a player picks a number that has no remaining factors on the board that player **misses** a turn.
- The first number chosen can **not** be a prime number.
- It is the responsibility of each player to identify the factors (points) they are to receive. Factors that are not identified remain 'in play'.
- The game finishes when the remaining numbers have no factors left on the board.

Factor Game Board 1

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G1

Instructions:

The winner of this game is the one with the most number of points.

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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

Additional Rules:

- If a player picks a number that has no remaining factors on the board that player **misses** a turn.
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- The game finishes when the remaining numbers have no factors left on the board.

Factor Game Board 2

TI-30XB MultiView™: Factor Game

G2

Instructions:

The winner of this game is the one with the most number of points.

Players take it in turns to choose a number.

The player whose turn it is receives the number of points equal to the number they chose.

The opponent is also awarded points equal to the sum of all of the factors of the chosen number.

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	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49

Additional Rules:

- If a player picks a number that has no remaining factors on the board that player **misses** a turn.
- The first number chosen can **not** be a prime number.
- It is the responsibility of each player to identify the factors (points) they are to receive. Factors that are not identified remain 'in play'.
- The game finishes when the remaining numbers have no factors left on the board.