

Multipingo

Students begin by writing numbers on their own five by five grid like the one shown on the right. Numbers can be used more than once.

After all the grids are complete, the students take turns rolling two 10 sided dice, multiplying the result together, and announcing the result to the class.

If the number appears on a student's grid, the student places a marker on the number. If the number appears more than once, the student can choose which ONE to cover.

The winner is the first student to complete a row, column or diagonal.

8	10	42	14	36
16	80	25	12	72
32	70	★	9	22
64	60	48	6	18
90	50	49	15	8

Extensions:

- Which row in the example above is least likely to produce a win?
- Is it good to have a number duplicated?
- Which number or numbers between 1 and 100 are most likely to be called out?
- Which number or numbers between 1 and 100 cannot be called out?
- Which number or numbers between 1 and 100 are least likely to be called out, but can be called out in at least one way?

The Math in This Problem:

This math fair game engages students in a game like bingo, where they randomly assign numbers (1-100) to their grid and use two 10-sided dice to call out numbers. The objective of such a game is to observe and study the outcomes from multiplying the rolls from the two dice. The mathematics and observations associated with Multipingo are fundamental lessons in probability.

