

GAMES: INTEGER BINGO

This game is played like Bingo, but students solve problems involving integers. The goal is for students to get five integers in a row on their board.

PREREQUISITES

Students should have knowledge of all four operations with integers.

MATERIALS

Chips or markers
Bingo grids

PRESENTATION

Give students blank 5×5 grids and some sort of chips or markers.

SAY “Write each of the integers from -10 to 10 in any of the spaces on the board.”

- This reviews the term “integer,” and the idea that zero is an integer as well.
- The students should have four blank spaces.

SAY “You should have four blank spaces. Fill these in with any integers from -10 to 10 .”

+1	+10	+4	-6	-8
-2	+2	-1	-10	+7
+3	-9	+8	+6	2
-5	0	-7	-4	0
-8	+9	-3	+6	+5

When students have completed their grids, provide the rules.

SAY “On the board, I will write a problem whose answer is an integer from -10 to 10 . Your job is to simplify the expression. When you think you have the correct answer, place a marker on that spot. If you have more than one choice, for example you have two sevens, then you must choose *one* of those spots to put the marker. If the number comes up again, you can cover the other one later. When you have five in a row, yell ‘Bingo!’ At that time, we must check the work. No one should clear their boards in case there is a mistake. If there is not a Bingo, we will keep playing.”

Here are some examples of questions to ask to give variety and extension to this work:

$$(-3) - (-2)$$

$$7 + 8 - 4 - 10$$

$$-(-(-(-1)))$$

$$IV - XVI$$

Number of planets – Number of stripes on U.S. flag

$$\frac{-(5)^2}{(3 - 8)}$$

$$7,000,000 \div -1,000,000$$

$$3\frac{1}{4} - \frac{41}{4}$$

When someone yells “Bingo,” ask the student to read the integers that he thinks make a Bingo. As a class, find the question that corresponds to the answer the student has on his board. If there is a mistake, continue the game. If not, students can clear the boards and begin again.

NOTES

- Any variation of Bingo that one may know for a winning combination can be played, such as four corners, blackout, etc.
- It is helpful first to make a list on a sheet of paper of different integers from -10 to 10 so that the order you will pick the numbers is predetermined. Often when a student says, “I need a 7,” it is difficult to pick the next number fairly. We can make this list long, perhaps thirty or forty numbers. Whenever there is a Bingo, we can continue the game from where we left off.
 - We could also have the questions written down ahead of time, as in the examples above.
- Students can play this game amongst themselves, making up their own questions.
- As students learn new skills, we can always come back and play integer bingo. For example, the integers can be an x - or y -coordinates on a grid, or the solution to a linear equation. We can also use integer Bingo to review concepts such as rounding, decimals, fractions, or percentages.



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