

Finders, Keepers

Exploring Equations

In this number game, each player scores points by correctly by supplying correct addends for a selected equation. The opponent scores points for incorrect responses.

Directions:

1. The first player selects an equation below.
2. The numbers provided in the box below are addends to be used for each equation. The first player selects two different addends and fills in the blanks in the selected equation. Addends may be reused for other equations.
3. The opponents verifies the answer using a calculator.
4. Each correct equation earns the player 2 points. Each incorrect equation earns the opponent 1 point. Correct equations cannot be reused in the game.
5. Players take turns until correct addends have been "found" for each equation. Winner is player with most points after all 3 rounds.

5	-5	-12	3	-4	17
-14	11	-8	2	-20	20
-16	6	-5	19	-13	8

Round 1:

- | | |
|------------------------|------------------------|
| 1. _____ + _____ = -12 | 6. _____ - _____ = -5 |
| 2. _____ + _____ = 0 | 7. _____ - _____ = -19 |
| 3. _____ + _____ = -30 | 8. _____ - _____ = 6 |
| 4. _____ + _____ = 36 | 9. _____ - _____ = 32 |
| 5. _____ + _____ = 1 | 10. _____ - _____ = -3 |

Round 2:

Directions remain the same with the exception of point values. A correct response is 4 points. An incorrect response is 2 points.

- | | |
|-------------------------|------------------------|
| 11. _____ x _____ = 280 | 16. _____ ÷ _____ = -5 |
| 12. _____ x _____ = -25 | 17. _____ ÷ _____ = 4 |
| 13. _____ x _____ = 95 | 18. _____ ÷ _____ = -1 |
| 14. _____ x _____ = 182 | 19. _____ ÷ _____ = 3 |
| 15. _____ x _____ = -20 | 20. _____ - _____ = -4 |

5	-15	-12	3	-4	17
-14	11	-8	2	-20	20
-16	6	-5	19	-13	8

Round 3:

Score 5 points for both correct and incorrect responses.

Use three numbers and either add, subtract, multiply or divide to write an equation that will yield the appropriate solution. Write the equation in the spaces provided.

21. _____ = 25

22. _____ = -11

23. _____ = -375

24. _____ = 10

25. _____ = -28

Thinking Cap

Make your own list of numbers and problems for another student to solve. Be sure to use both positive and negative numbers.

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Equations

Using this Activity:

This activity is designed to have students practice computation skills with integers and to verify answers through the use of the calculator. The calculator is not intended to be the method by which the student solves the problem. An alternative use of this activity sheet is to give students a designated amount of time to complete as many equations as possible in each section. Time can be broken down into several rounds. The overhead calculator can be used to verify student responses.

For teachers of students who have not worked with integers, you can make up a new set of numbers to use and solutions for each round.

Objective: Use the calculator to check equations written with given numbers and solutions

NCTM Standards: Algebra: Mathematics as Problem Solving; Computation and Estimation.

Possible answers for each round:

Round 1:

- | | |
|--------------------|--------------------|
| 1. $(-15) + 3$ | 6. $(-20) - (-15)$ |
| 2. $20 + (-20)$ | 7. $(-16) - 3$ |
| 3. $(-16) + (-14)$ | 8. $(-14) - (-20)$ |
| 4. $19 + 17$ | 9. $17 - (-15)$ |
| 5. $5 + (-4)$ | 10. $(-18) - (-5)$ |

Round 2:

- | | |
|--------------------------|-----------------------|
| 11. $(-14) \times (-20)$ | 16. $20 \div (-4)$ |
| 12. $5 \times (-5)$ | 17. $(-16) \div (-4)$ |
| 13. 5×19 | 18. $5 \div (-5)$ |
| 14. $(-14) \times (-13)$ | 19. $(-15) \div (-5)$ |
| 15. $(-5) \times (-4)$ | 20. $20 \div (-4)$ |

Round 3:

21. $(-15) \div 3 \times (-5)$
22. $(-20) \div 20 \times 11$
23. $15 \times 5 \times (-5)$
14. $8 \times (-5) \div (-4)$
15. $(-16) \times (-14) \div (-8)$