

Table of Contents

A Perfect Square Match	1
A Step Back in Time	4
Billion-Dollar Hot Dogs	8
Competing Integers	12
Competing Percentages	14
Cover the Area	16
Cross-Country Trip	18
Decimal Dominoes	21
Desperately Seeking Decimals.....	24
Eradication	26
Find Me If You Can	29
Fraction Fish.....	31
Geoboard Match	35
Geometric Mystery	38
Maths Monopoly	41
Maths Scavenger Hunt.....	44
Measurement Match	46
Mystery Proportion	48
Name that Symbol	50
Number Mystery	55
Order War	56
Percentage Match.....	58
Positive or Negative Numbers	60
Rational Madness	61
Shapes, Shapes, Shapes	63
Spin-Roll Expressions.....	66
Square T ²	72
Stars and Squares	74
Strategic Plotting.....	77
Stem-and-Leaf Logic	79
Sweet Success	81
Twins.....	83
Westward Go!	86

About This Book

The mathematics community is encouraged to teach using a variety of strategies. This book offers a wide variety of games – card games, board games, dice games, and word and picture games to reinforce mathematical skills and to develop mathematical power in students. Games are naturally fun and motivating; therefore, using games as an instructional strategy will make mathematics more inviting for your students.

The games are designed for you to use materials available in your school. Most games provide the necessary materials for duplication. We suggest that you laminate these materials to ensure their durability. The first page of each game is written in a brief outline form allowing you a quick glance at the objective, materials needed and the number of players. The directions may be copied and given to students.

We recommend that prior to starting any game you do the following:

- Explain the purpose of the activity, for it is essential that students make the connection to mathematics.
- Play the game with student volunteers to allow the class to observe the process and ask questions about the procedures or game rules.
- Debrief the game. Direct students to explain the purpose of the game; write what mathematics the game helped them learn and how the game helped them learn it; or tell their partner what they liked or disliked about the game.

Most games can be adapted to include other mathematical skills. You may wish to construct additional game cards that meet your specific instructional objective.
ENJOY!

Competing Integers

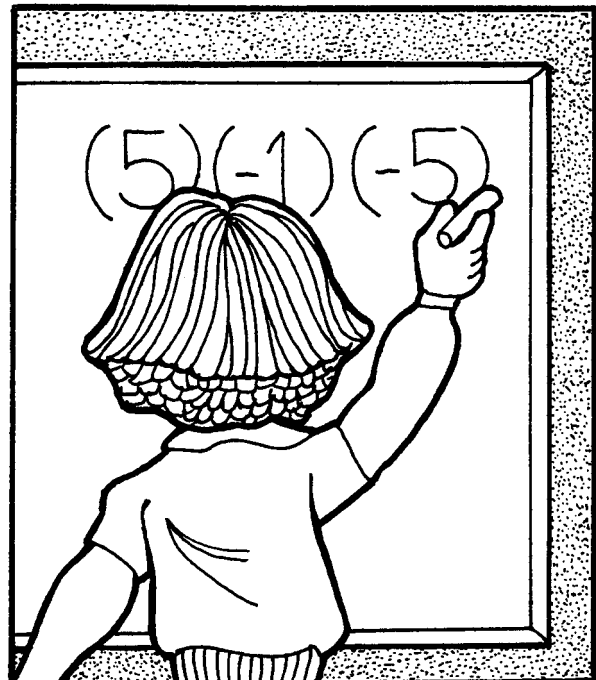
Objective:
to practise computing integers
mentally

Materials needed:
blackboard

Whole class activity

Directions:

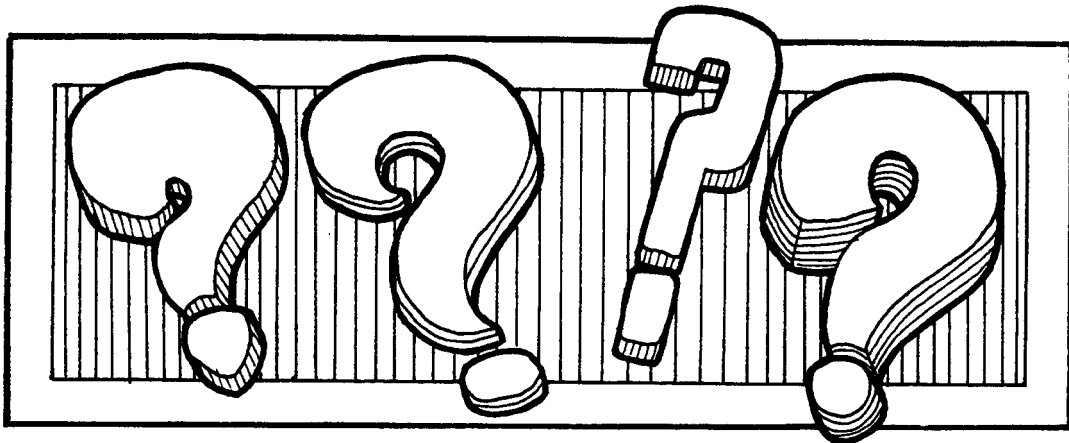
1. Divide the class into two teams. Place each student's name from each team on an index card. Keep the two decks separate. Shuffle the name cards.
2. Take a name card from each stack and call the students' names. The two students go to the blackboard and wait for you to call out a problem.
3. Once you state the problem, each student is to write the problem on the board with the answer. The first student to correctly write and then solve the problem wins a point for his or her team.
4. After every member of each team has had an opportunity to participate, the team with the greatest number of points wins.



Problems

$-28 + 24$	-4	$(-9)(5)$	-45
$-2 + (-3)$	-5	$(45)(-1)$	-45
$14 + 8$	22	$(5)(-1)(-5)$	25
$-16 - (-4)$	-12	$4 + 26$	30
$(-6)(-8)$	48	$-12 - (-6)$	-6
-63 divided by -9	7	$-6 - 25$	-31
$-45 + 3$	-42	$5(-2)8$	-80
-32 divided by 4	-8	$(-6)(-11)$	66
$12 + (-32)$	-20	-64 divided by -8	8
$-5 + 16$	11	-6 divided by -2	3
77 divided by 7	11	$15 - (-5)$	20
$(-2)(8)(0)$	0	$4(-5)$	-20
$-13 + 13$	0	$3(-3)(6)$	-54
$(-2)(-4)(-2)$	-16	$48 - (-28)$	76
35 divided by -5	-7	$(-3)(7)(0)$	0

Create additional problems to extend the game.



Competing Percentages

Objective:

to practise solving percentage problems

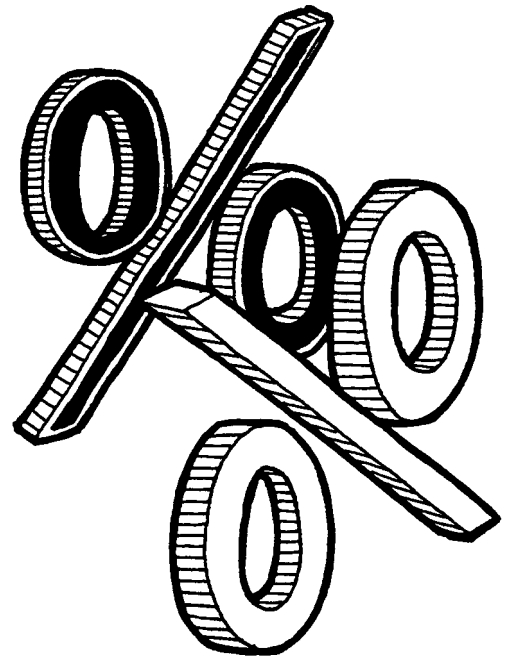
Materials needed:

blackboard
paper and pencil
calculator

Whole class activity

Directions:

1. Divide the class into two teams. Place each student's name from each team on an index card. Keep the two decks separate. Shuffle the name cards. Place two desks at the front of the room.
2. Take a name card from each stack and call the students' names. The two students go to the desks at the front of the room and wait for you to call out a problem.
3. Once you state your problem, each student is to solve the problem on paper and then write the problem on the board with the answer. The first student to correctly explain and legibly write the problem wins a point for his or her team.
4. After every member of each team has had an opportunity to participate, the team with the greatest number of points wins.



Problems

1. What percentage of 20 is 16?
80%
2. 24 is what percentage of 25?
96%
3. 10% of what number is 42?
420
4. What number is 40% of 236?
94.4
5. 50% of what number is 528?
1056
6. What percentage of 200 is 68?
34%
7. 3.5 is what percentage of 50?
7%
8. 30 is 60% of what number?
50
9. What number is 2.5% of 9600?
240
10. 100% of 456 is what number?
456
11. 75% of what number is 60?
80
12. 250% of what number is 50?
20
13. 18 is what percentage of 18?
100%
14. What percentage of 66 is 44?
 $66\frac{2}{3}\%$
15. What number is $37\frac{1}{2}\%$ of 120?
45
16. What percentage of 48 is 2.4?
5%

Create additional problems to extend the game.