Prepared by


Ideas

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Each Ideas issue presents activities that are appropriate for use with students at various levels in the elementary school. The activity sheets are so arranged that they can be easily removed and reproduced for classroom use. Permission to reproduce them for such use is not necessary.

## IDEAS For Teachers

1. Objective: Experience in solving addition problems.
Levels: 1,2
2. Objective: Experience in solving addition and subtraction problems.

Levels: 3,4
3. Objective: Experience in solving two-step addition, subtraction, and multiplication problems.
Levels: 5,6
4. Objective: Experience in solving two-step addition, subtraction, multiplication and division problems.

Levels: 7,8

Directions for teachers:

1. Remove the master and reproduce one copy for each student.
2. Students fill in their tic-tactoe by randomly writing the numbers in the nine empty spaces.
3. Students choose any problem at the bottom of the page, solve it, and mark ( $X$ ) the answer on their tic-tac-toe.
4. At the lower levels, students win with a simple tic-tac-toe (three Xs in a line vertically, horizontally, or diagonally). With older students, two tic-tac-toes (three Xs in a line twice) are needed to win.

Depending on your class, you may want to read the problems to your students. If the problems are read aloud, have the students select the order in which the problems are read.

The game may be played in partnerships. Players take turns selecting a problem, then mark their answer on the tic-tac-toe with either an $X$ or 0 .

## IIDEASS Lames

## Problem Solving Tic-Tac-Toe

## Tic-Tac-Toe Board



Pick any problem below.
Find the answer to the problem.
Put an $X$ on the answer in the tic-tac-toe.
Three $X s$ in a line wins.

## Problems

You had 3 toy cars. Sue gave you 4 more. How many cars do you have?
You had 5 cents. You got 5 cents more. How many cents do you have?
You have 1 yellow pencil, 1 red pencil, and 1 blue pencil. How many pencils do you have?
There are 6 fish in a bowl.
There are 3 fish in another bowl.
How many fish altogether?
The park has 4 swings. It has 2 slides. How many things are there to play on?

Bill counted 5 boys playing kick ball. Ann counted 6 girls playing kick ball. How many are playing kick ball?
We had 2 bats. Coach has 6 new bats. How many bats do we have?

Your mom gave you 2 cookies. Your brother gave 1 more. Your sister gave you 1 more. How many cookies did you get?

You ate 2 hamburgers. Your dad ate 3 hamburgers. How many hamburgers were eaten?

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## Problem Solving Tic-Tac-Toe

Tic-Tac-Toe Board


Now choose any problem below. Solve it.
Put an $X$ on the answer on the tic-tac-toe board.
Three $X$ s in a line wins.

## Problems

Add 7 to my mystery number and you get 15 . What's my mystery number?
Subtract 6 from my mystery number and you get 3 . What's my mystery number?
Subtract 5 from my mystery number. Then add 8 and you get 10 . What's my mystery number?
Add my mystery number to itself. Then subtract 4 and you get 0 . What's my mystery number?

Subtract 7 from my mystery number and you get 3 . What's my mystery number?

Add 17 to my mystery number and you get 20. What's my mystery number?
Subtract 3 from my mystery number. Then add 9 and you get 10 . What's my mystery number?
Add 8 to my mystery number. Then subtract 8 and you get 5 . What's my mystery number?
Add my mystery number to itself and you get 12. What's my mystery number?

## T SD <br> Levels: 5,6

## Problem Solving Tic-Tac-Toe

Tic-Tac-Toe Board


Now choose any problem below. Solve it.
Put an $X$ on the answer on the tic-tac-toe board. You win when you get two tic-tac-toes.

## Problems

I had 45 comic books. I gave my friend 24 of them. My friend gave me 17 of her comic books. How many comic books do I have now?
How many legs on 12 dogs and 15 cats?
How much money is 31 dimes and 18 nickels?
I bought 4 records at $\$ 4.25$ each. I gave the clerk $\$ 20$. How much change did I receive?
How many hours in 3 days and 5 hours?
Roller coaster rides cost 25¢ each. Ferris
wheel rides cost 50 each. What's the cost for four roller coaster rides and 2 ferris wheel rides?

I had $\$ 20$. I spent $\$ 2.50, \$ 4.25$, and $\$ 7.25$. How much is left?

How many legs on 9 cows and 12 chickens?
There are 4 teams of fifth graders and 5 teams of sixth graders. Each team has 9 players. How many players are there?

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## Problem Solving Tic-Tac-Toe



Now choose any problem below. Solve it. Put an $X$ on the answer on the tic-tac-toe board.
You win when you get two tic-tac-toes.

## Problems

If you add 58 to my mystery number and then divide by 7 , you get 10 . What's my mystery number?
If you inultiply my mystery number by 5 and then add 10 , you get 75 . What's my mystery number?

If you divide my mystery number by 7 and then add 18 , you get 20 . How old am 1 ?
If you multiply my mystery number by 6 and then divide by 12 , you get 4 . What's my mystery number?
If you multiply my mystery number by 9 and then subtract 49 , you get 50 . What's my mystery number?

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