## Activity Name

Fast nines and Fast tens

## Subject/Subject Area/Category

Math facts, problem solving

## Grade Level

Primary Grade 1-2

## Activity Time

Minimum of 20 minutes once the children understand the game.

## Learning Objectives

- Students learn how to solve a mathematical equation with a missing addend.
- Students will learn the combinations of addends to find the sums of nine and ten.
- Students practice math facts with accuracy and immediacy for sums of nine and ten.


## Support Materials

TI-10 and Overhead unit, a variety of dice with numbers 0-9, manipulatives as needed

## Before the Activity directions

Review the combinations of addends to make the sum of nine or ten using mainpulatives. Model if necessary. Children record the combinations in their math notebooks. Also, encourage them to look for the patterns and relationships of the addends. Then model taking the second addend out of the equation.
Example: 4+? = 10

Students calculate the missing addend using the manipulatives. Explain to the students that they will be playing a similar game using the TI-10.

## During the Activity directions

Using the TI-10 Overhead demonstrate the game. Roll a dice. For example, a three is rolled.
(keystrokes used on $\mathrm{Tl}-10$ )
Press On
Press Problem Solving Key
Auto
Press the equation $3+$ ? $=10$
Enter
You should see $3+$ ? = 10 on the screen.
ISOL
Then press 7
Enter
You should see 3 + 7= 10
YES
The game is continued for as long as you wish. Children should use manipulatives, if needed. You may scroll up on the screen using the arrow key to check accuracy and problem solve if the child is experiencing any misunderstanding.

## After the Activity directions

Review what the role of the calculator and the role of the operator are. What did they notice as they played Fast Nines or Fast Tens? What helped them with calculating the missing addend? Ask the children to think of other ways they could use this problem-solving tool. What were the combinations they came up with?

