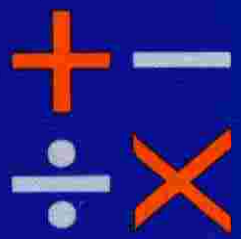
MATH TALK



MIX IT











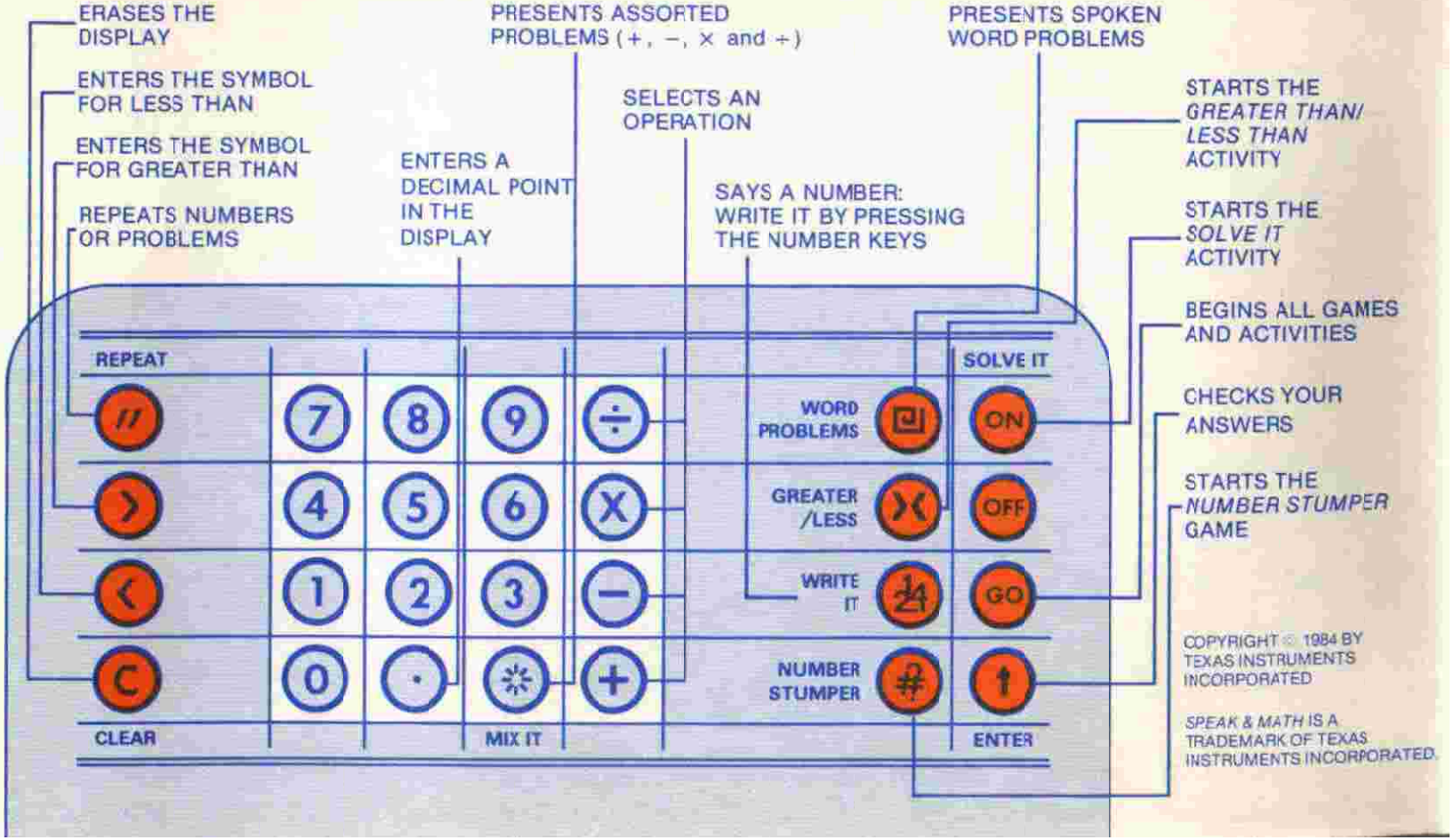




A 21-page fun-filled activity book for

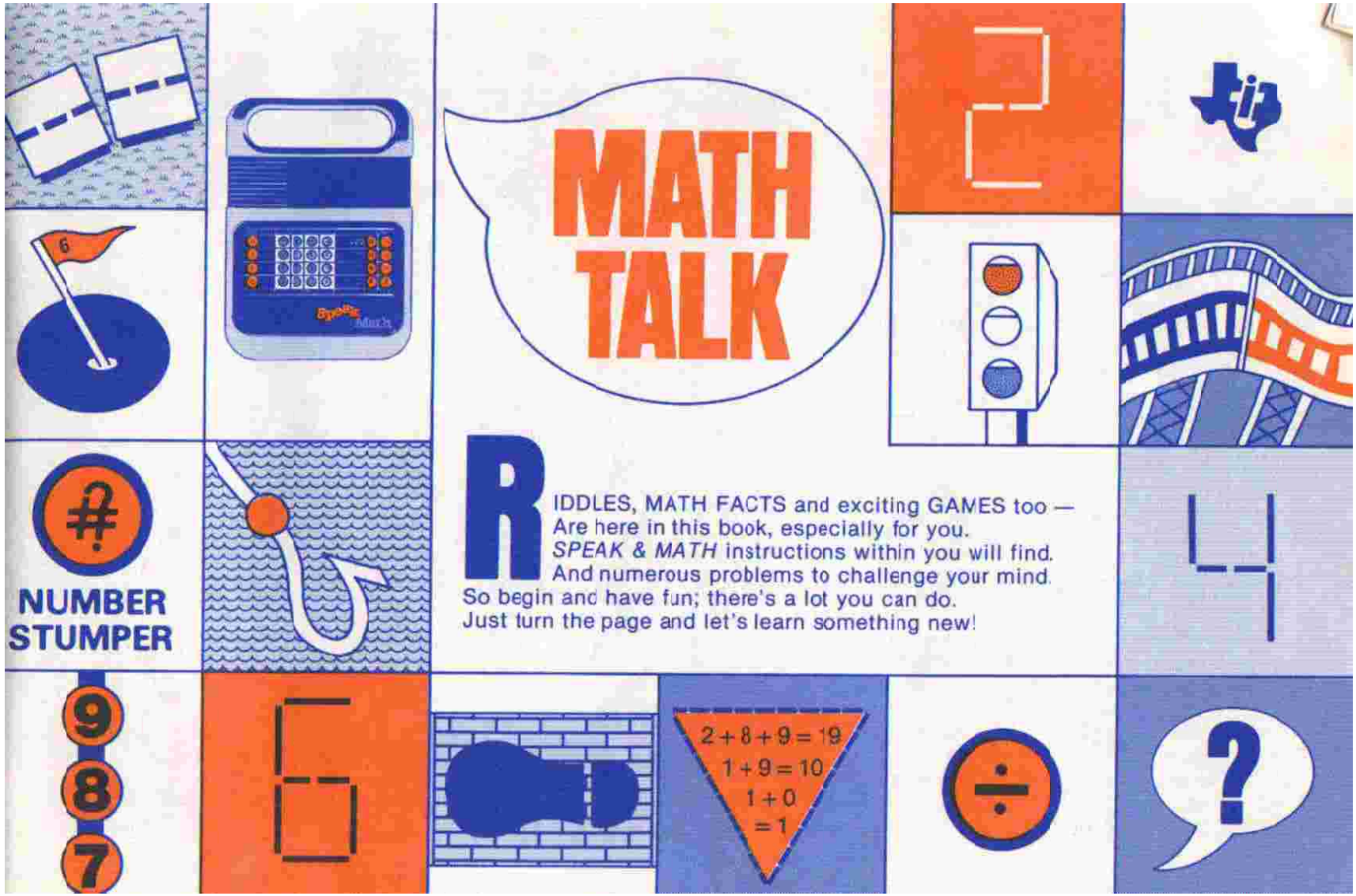
Speak & Math™

THE KEYS TO SPEAK & MATH FUN



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SPEAK & MATH IS A TRADEMARK OF TEXAS INSTRUMENTS INCORPORATED.


MATH TALK
RIDDLES, MATH FACTS and exciting GAMES too —
Are here in this book, especially for you.
SPEAK & MATH instructions within you will find.
And numerous problems to challenge your mind.
So begin and have fun; there's a lot you can do.
Just turn the page and let's learn something new!
NUMBER STUMPER
2+8+9=19
1+9=10
1+0
=1

ABACUS! ABACUS!

Can you "place" five markers on your abacus? To play you will need:

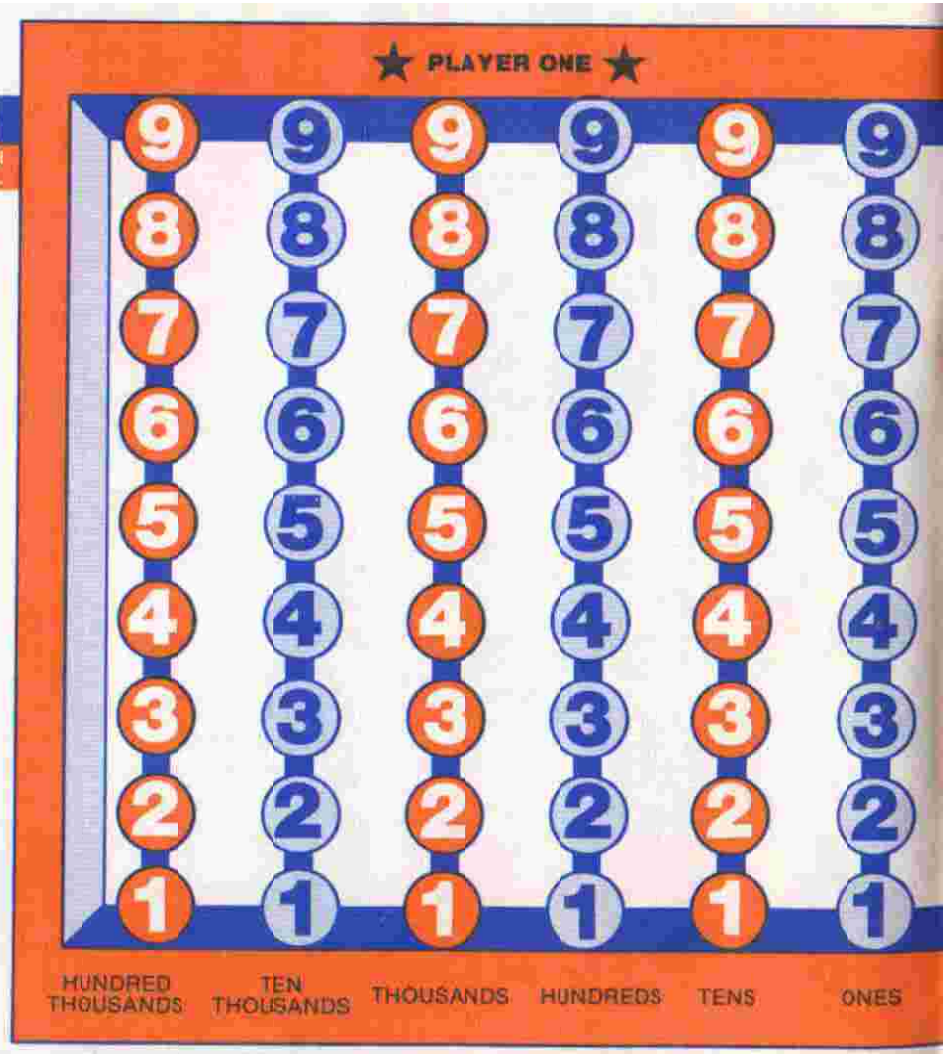
- two players
- five markers for each player

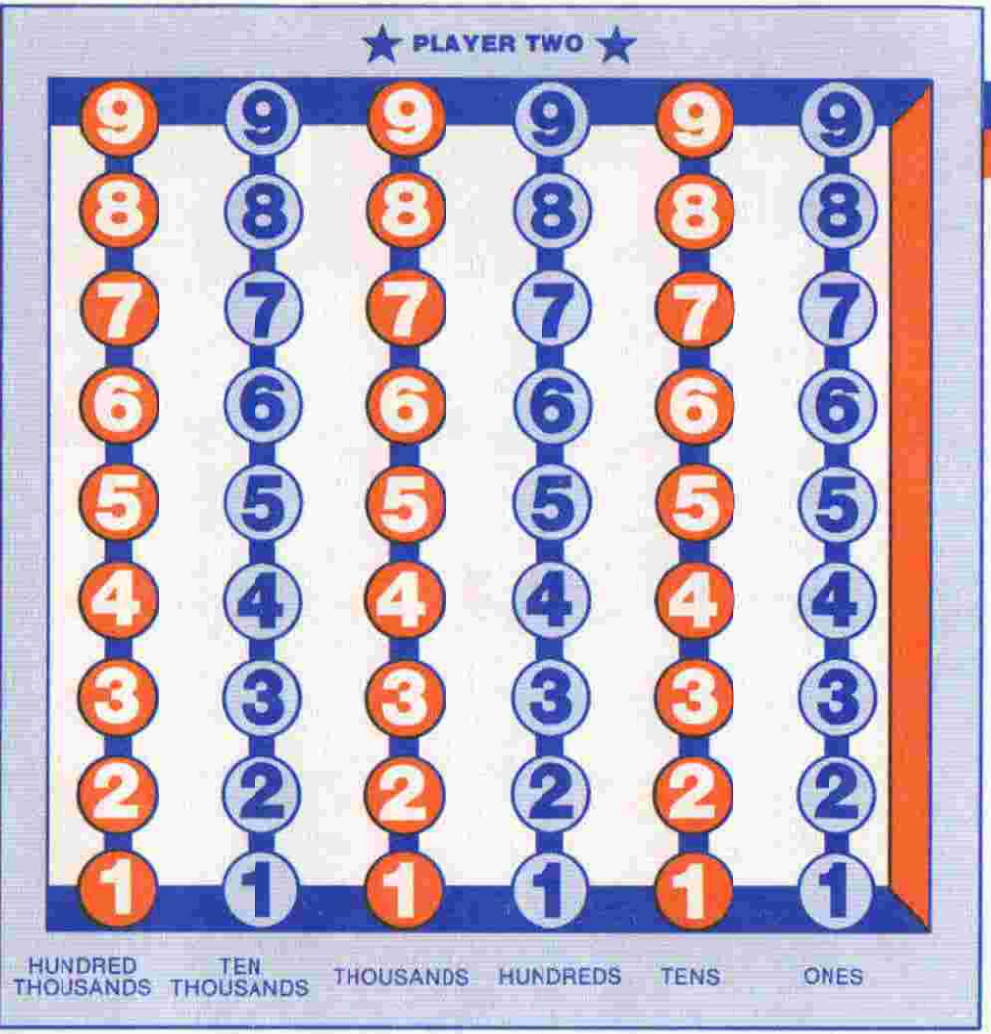
Decide who goes first and which abacus each player will use.

For each player's turn:

1. Select the "place" you will use (ones, tens, hundreds for Level 1; ones, tens, hundreds, thousands, ten thousands, hundred thousands for Level 2).
2. Press ON , WRITE IT, Level (1 or 2) and GO .
3. Listen carefully as the number is spoken. "Write" the number on the *Speak & Math*.
4. If your answer is correct, tell what digit is in the "place" you chose and put one of your markers on the correct bead on your abacus board. If your answer is incorrect or if there is a zero in the "place" you called, do not place a marker on the board.

The first player with five markers on the board wins.





Example:
You choose the tens place.
Speak & Math says
"one hundred twenty four."
Put your marker
on the 2 in the tens column
of your abacus.



1.

How far can a rabbit run into the woods?

(answer on page 21)

FIRE! FIRE!

Can you save the burning building? To put out the fire, you'll need:

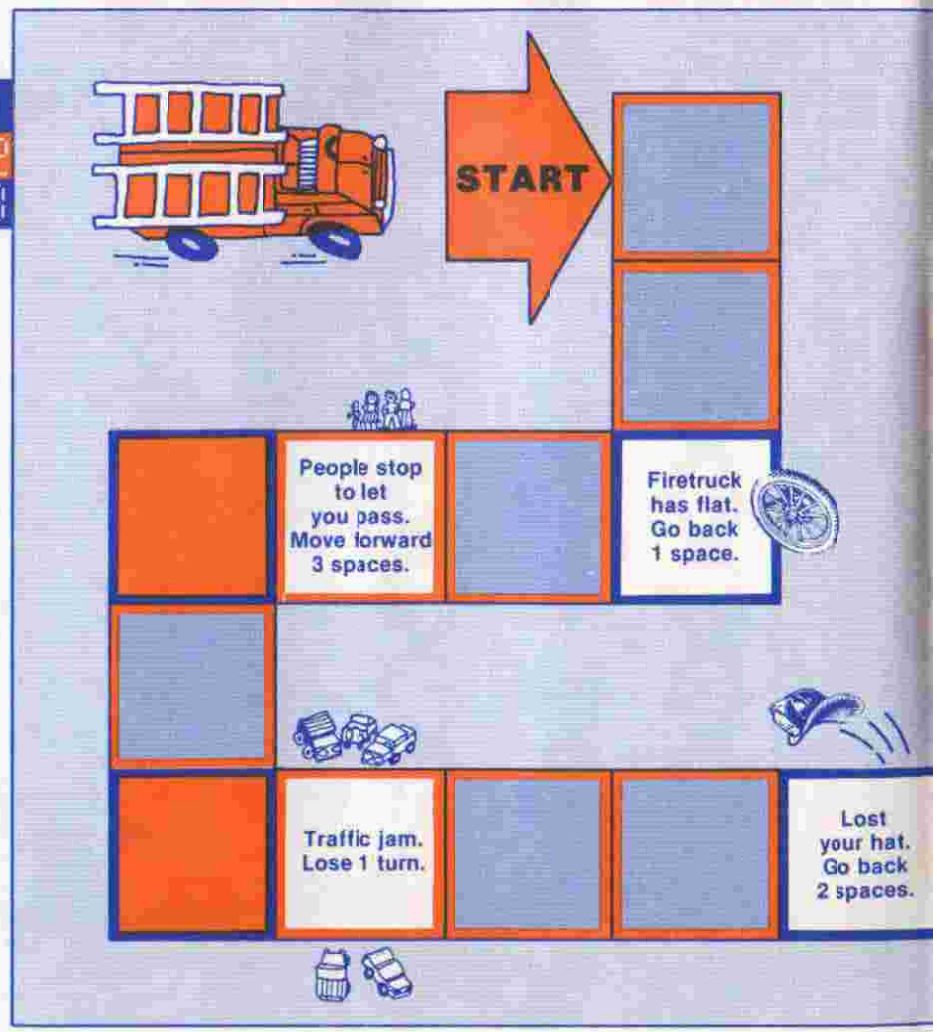
- two or more players
- a marker for each player

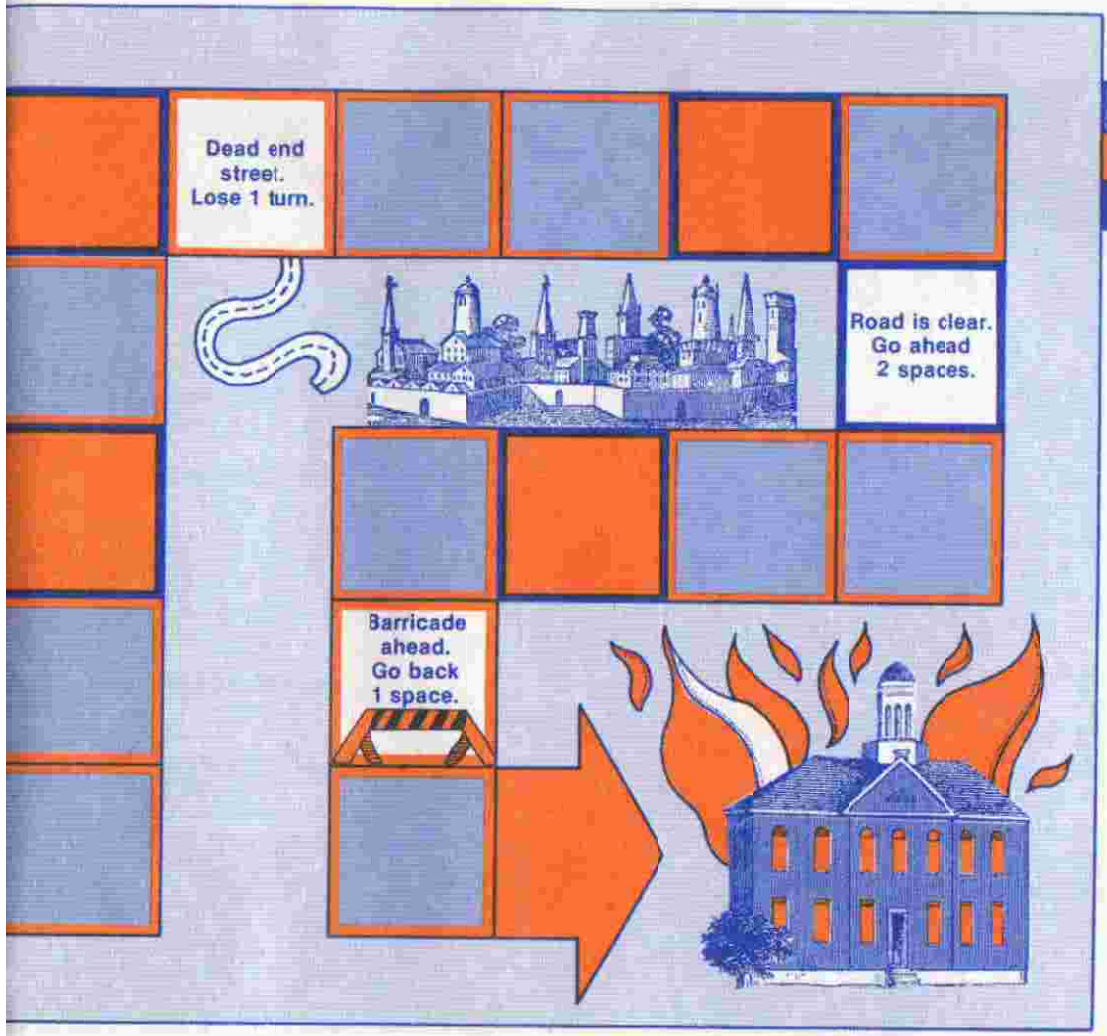
Put your marker on START and decide who goes first. To decide who goes first, press (ON) and (GO). Each player works one problem. The player with the correct answer closest to 10 goes first.

For your turn, press (2nd) WRITE IT, the level ((1), (2) or (3)) key and (GO). Solve the problem.

- If your answer is correct on the first try, move 2 spaces.
- If your answer is correct on the second try, move 1 space.
- If your answer is incorrect, do not move.
- If you land on a white square, follow the directions on the square.

Be the first player to put out the fire.





2.

You are driving a bus. At the first stop three people board. At the second stop seven board and two get off. At the third stop, eight board and six get off. How old is the driver?

(answer on page 21)

GAS UP!

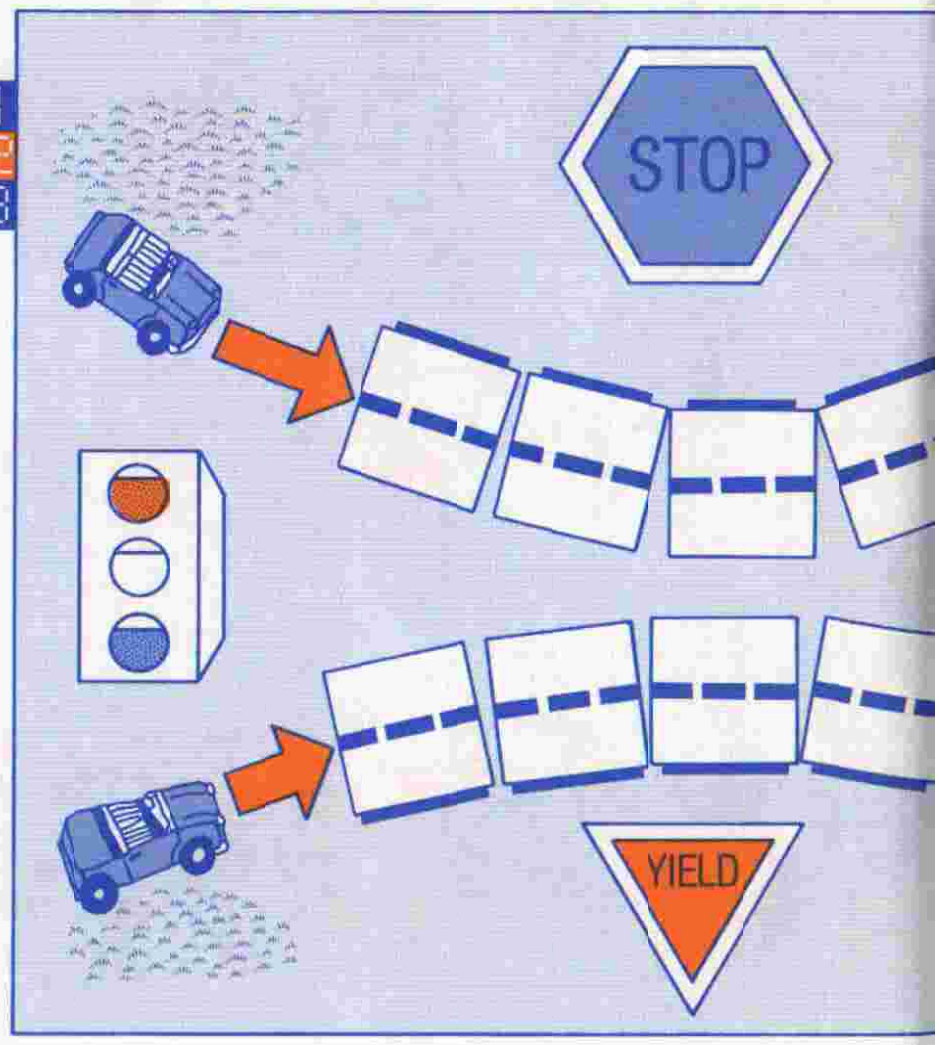
Select a car name. Cut that name out of a newspaper or magazine ad. Let the car name be your marker. Conserve gas in this game. Each correct answer saves gas. Each incorrect answer wastes gas and moves players closer to an empty gas tank.

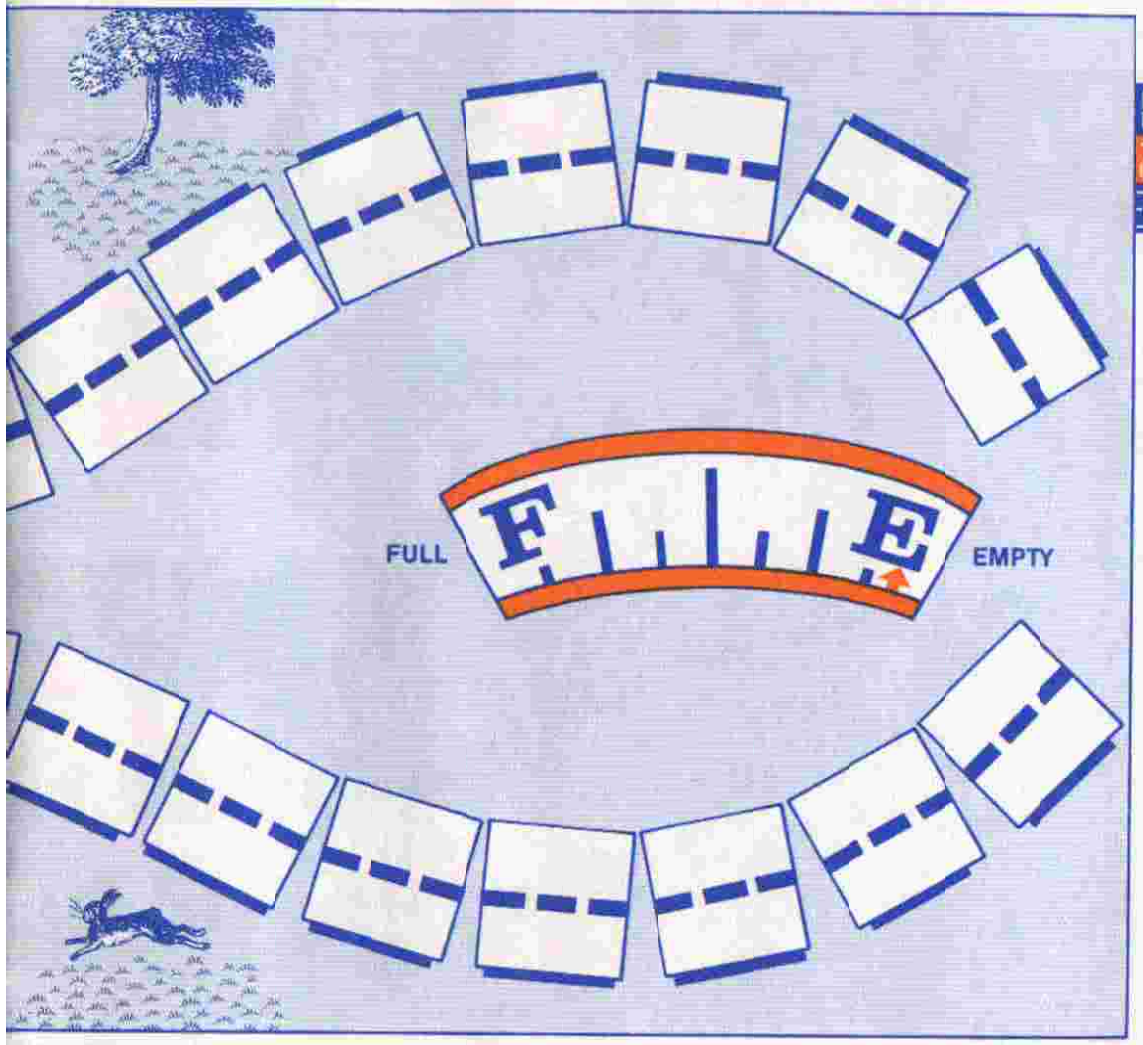
To play, you need:

- two or more players
- car names for markers

Press ON, an operation +, −, ×, ÷ or ✲ MIX IT, a level (1, 2 or 3) and ∞

Take turns solving problems. If you answer the problem correctly, you save gas and do not have to move your car. If your answer is wrong, you burn gas and must move your car 2 spaces. The first car to reach EMPTY is out of gas and loses the game. The car nearest FULL is the winner.







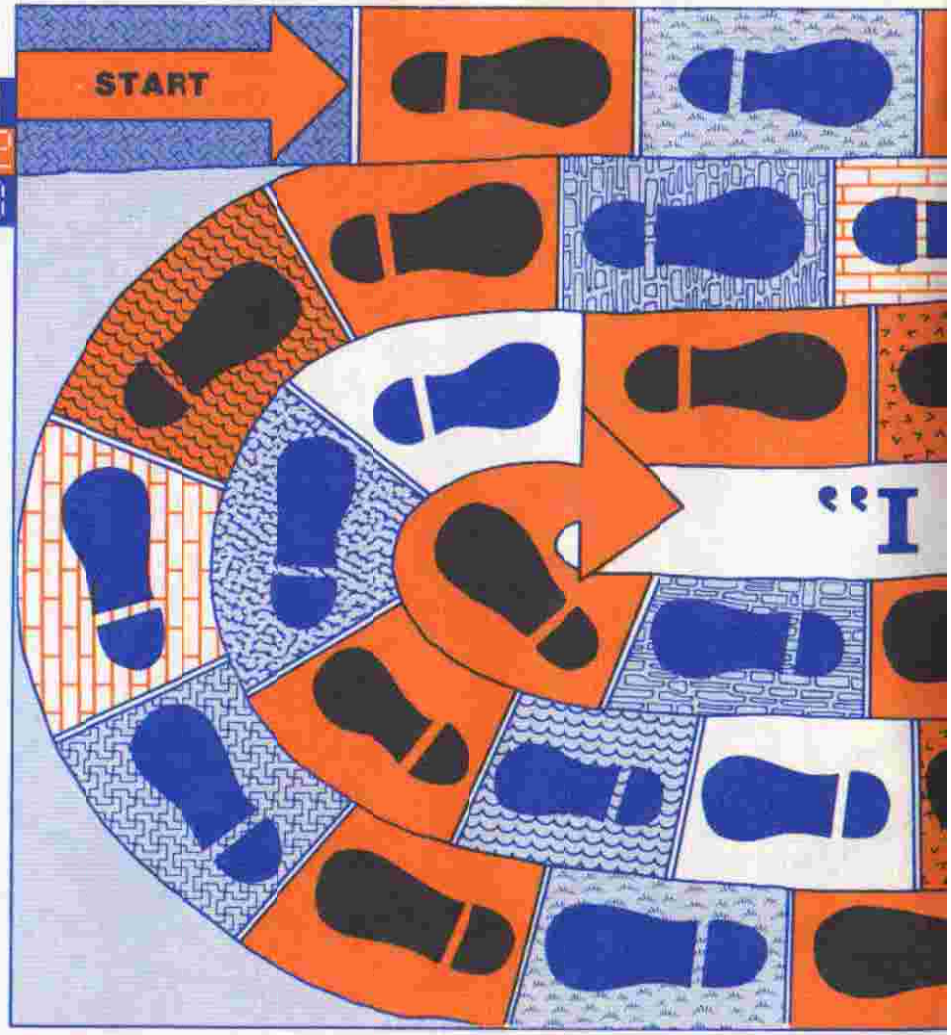


3.

Number Magic
— Think of a number
— Add the number to itself
— Multiply by 4
— Divide by 8.
Do you have the same number you started with?

(answer on page 21)

MAY I?



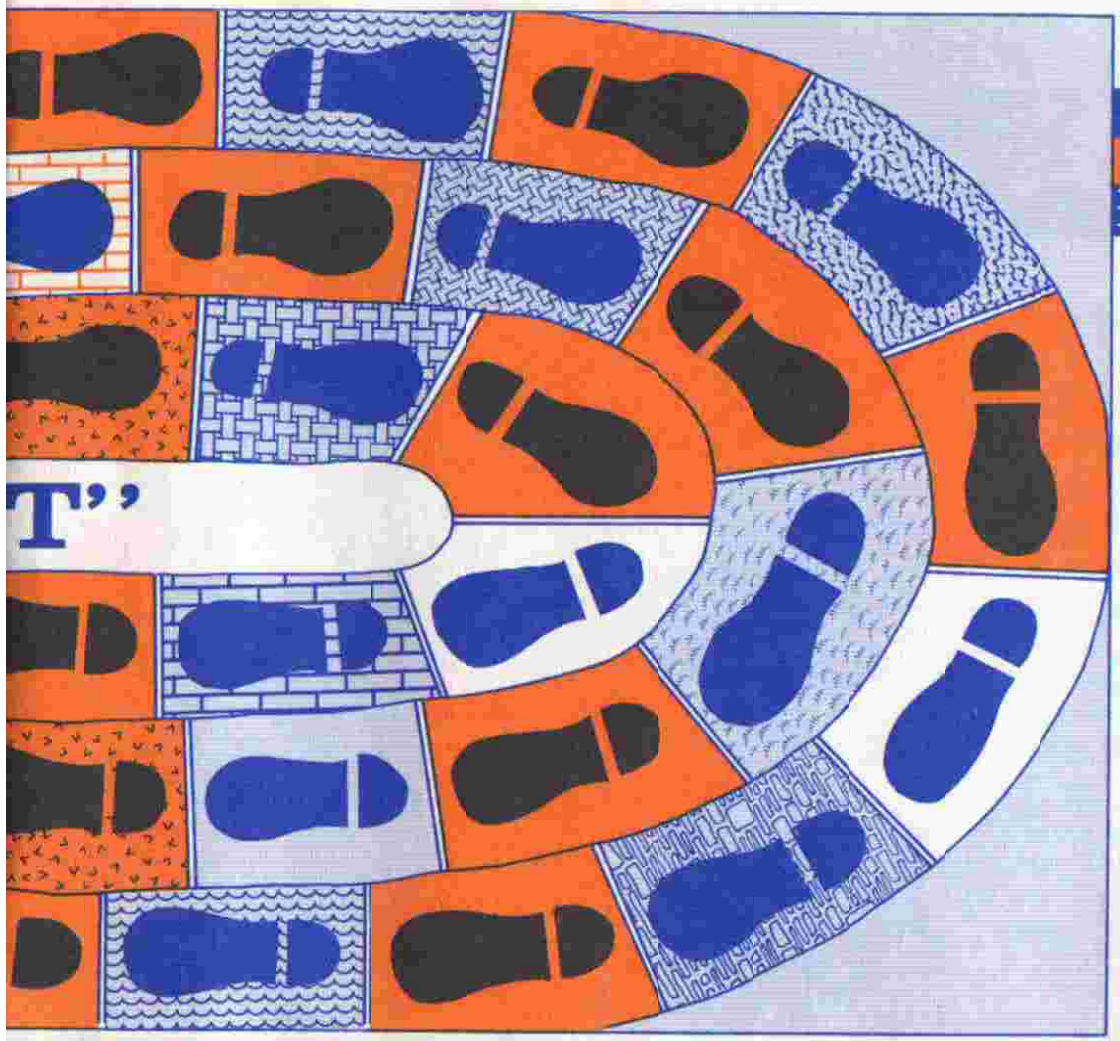
All you need to play this game is your *Speak & Math* and some friends. You can play this game anywhere — inside or outside. Use the board below or just find a big area and actually take the steps (begin 20 steps away from "IT.")

One person must be "IT." "IT" uses *Speak & Math*. Decide who will be "IT." Other players take turns asking "May I take (1, 2 or 3) steps?"

"IT" says "yes, if you can answer this." "IT" then begins a problem with *Speak & Math* and can use problems in **SOLVE IT** or **MIX IT**. The player must listen carefully and give an answer. If the player is correct, the player takes the asked-for number of steps. If the player's answer is incorrect, the player cannot move. The first player to reach "IT" wins and becomes the new "IT."

For a player to take 1 step, "IT" enters problems on Level 1. For a player to take 2 steps, "IT" enters problems on Level 2. For a player to take 3 steps, "IT" enters problems on Level 3.

"IT" can use ON **SOLVE IT** or ⚙ **MIX IT**. "IT" decides the operation (+, −, × or ÷). "IT" must use the same level as the number of asked-for steps.







4.

If a rooster sitting on the peak of a chicken coop lays three eggs, how many will roll down?

(answer on page 21)

GOING FISHING

Catch the BIG FISH! You will need:

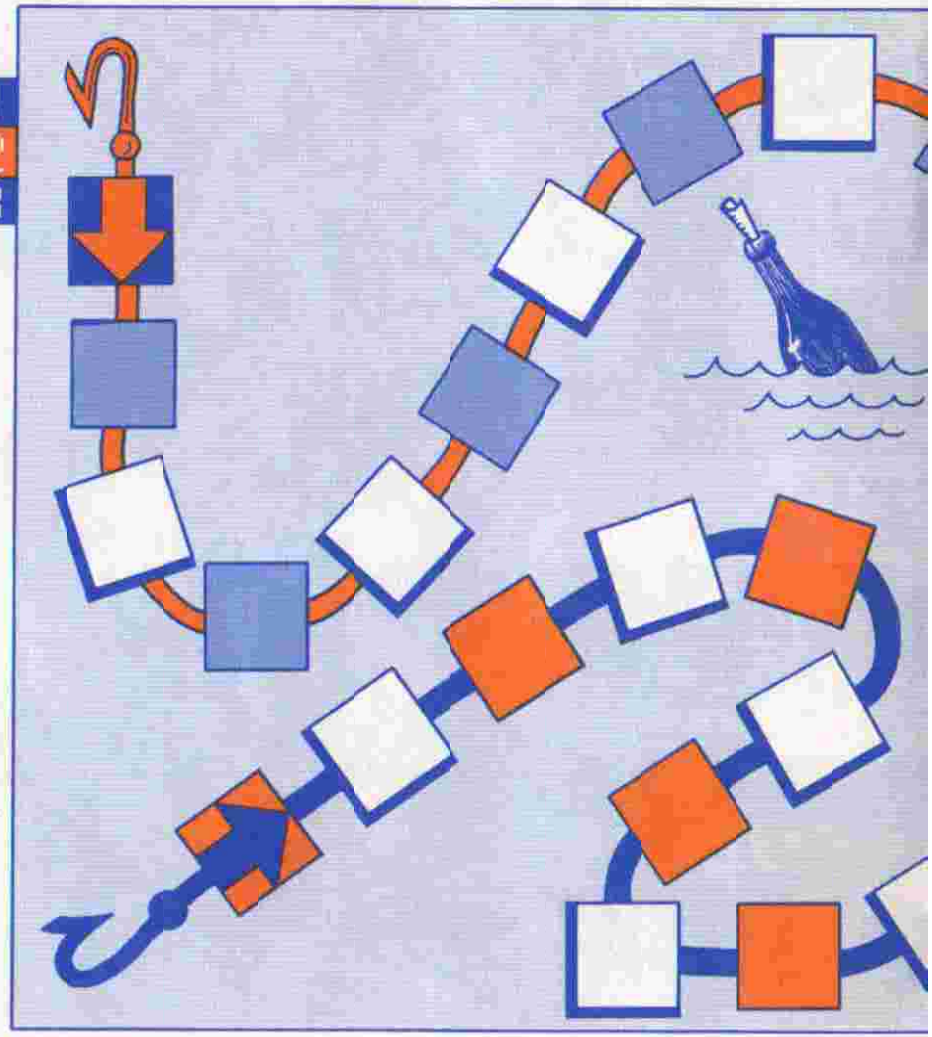
- three or more players
- one marker per player

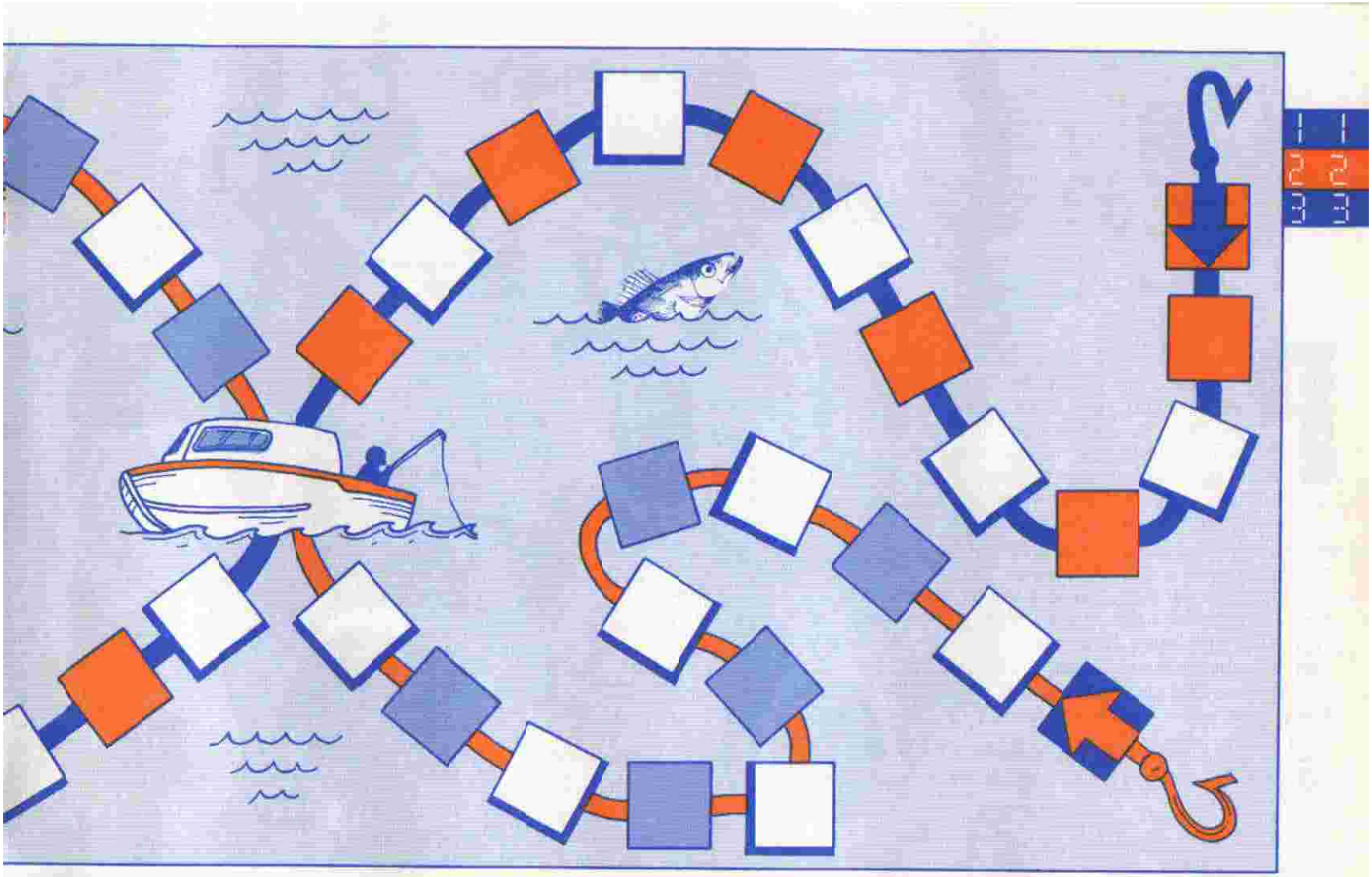
You are on a fishing boat ready to catch the BIG FISH. The "Boat Captain" operates *Speak & Math*, while the players try to bring in the catch. Decide who will be the captain and who will fish. All fishers place their markers on a hook.

The captain begins the game using the directions below. If you are the first player to correctly answer the problem *Speak & Math* speaks, you get a "strike" (a "fish" on the hook). After you get a "strike," move your marker up the "line" to land the "fish."

For each correct answer the "fish" is moved one space up the "line." For an incorrect answer the "fish" moves toward the hook one space. The first player to "land" the fish on the boat wins the game.

To begin: "CAPTAIN" presses ON, 2 **WORD PROBLEMS** or X **GREATER THAN/LESS THAN**, Level (1, 2 or 3) and GO. "Captain" enters the answer spoken. If the answer is incorrect, the next person fishing can answer.



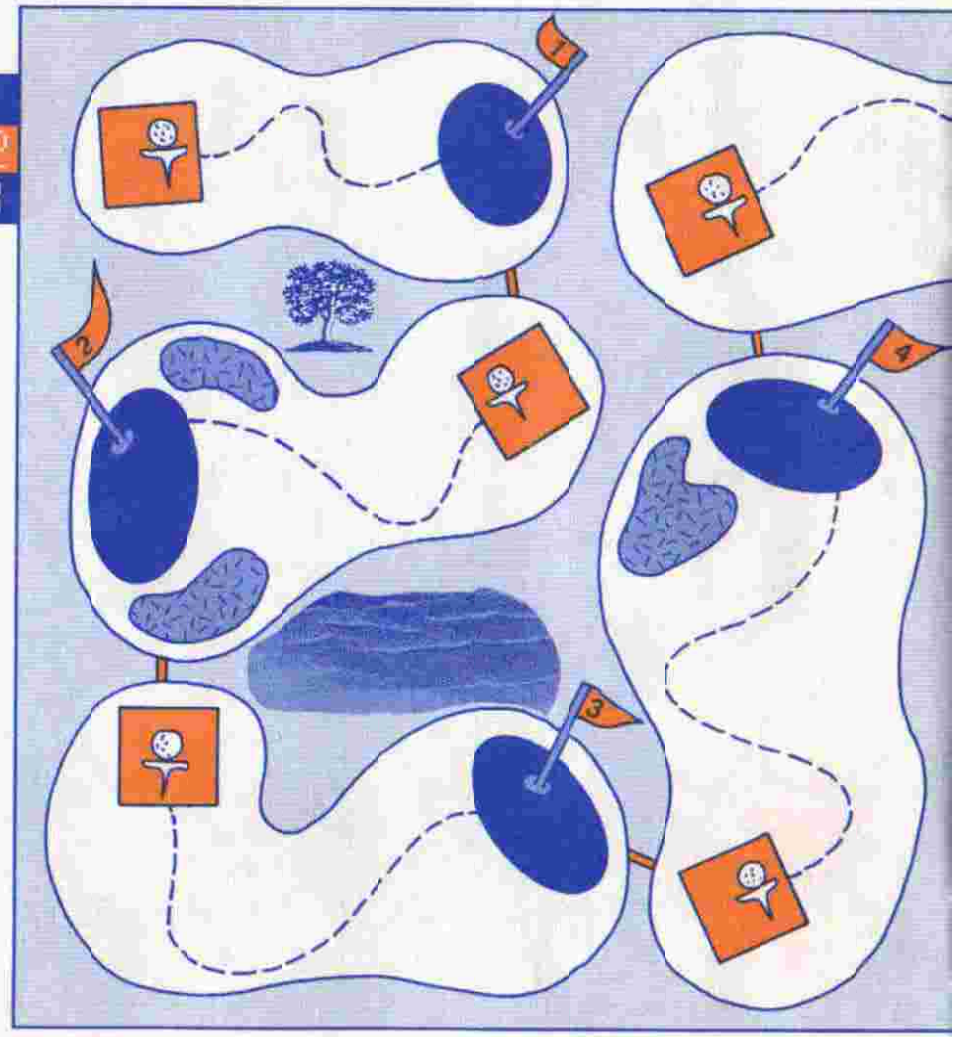


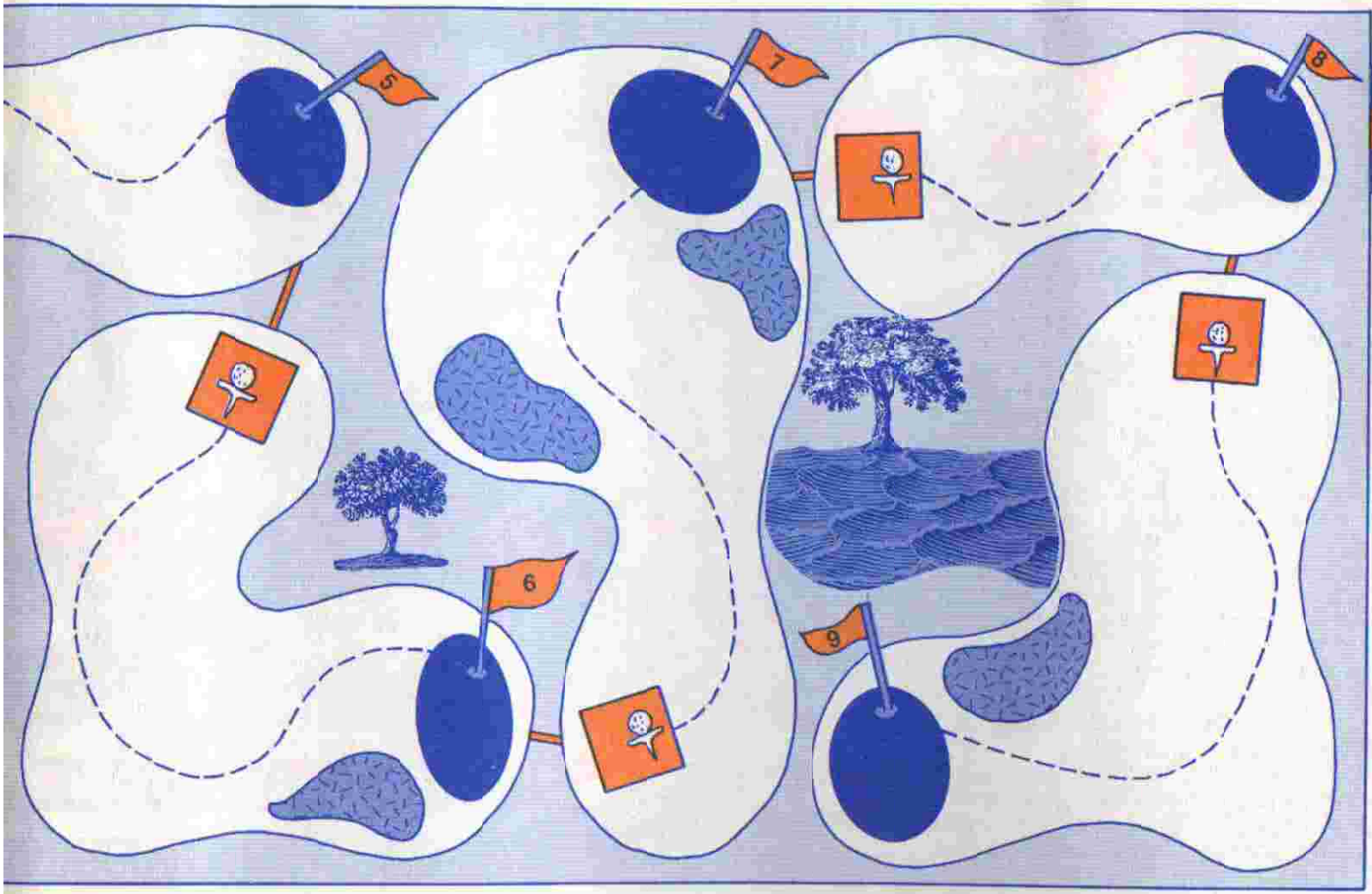
PAR FOR THE COURSE

Play golf alone, with friends or with teams. TEE OFF for each hole by working a **SOLVE IT** problem. Count your STROKES per hole by adding the digits of your answer until you have a one-digit number. *Example:* Answer = 268 (268 = 2 + 6 + 8 = 16, 1 + 6 = 7. For Hole #1, score 7 strokes).

Play NINE "Holes." The player with the least number of strokes is the winner. An incorrect answer scores a stroke value of 9 (as in the friendly game of golf). Team players should add strokes for each hole and divide by the number of players on the team (average number of strokes). You will need paper and pencil to keep score.

To Play: Decide which golfer will tee off first. Then, take turns. To begin, press (ON), operation ((+), (−), (×), (÷) or (✲)), Level ((1), (2) or (3)) and (∞). Good luck. May the best "golfer" win!




5
7
8
6
9

LOOP THE LOOP

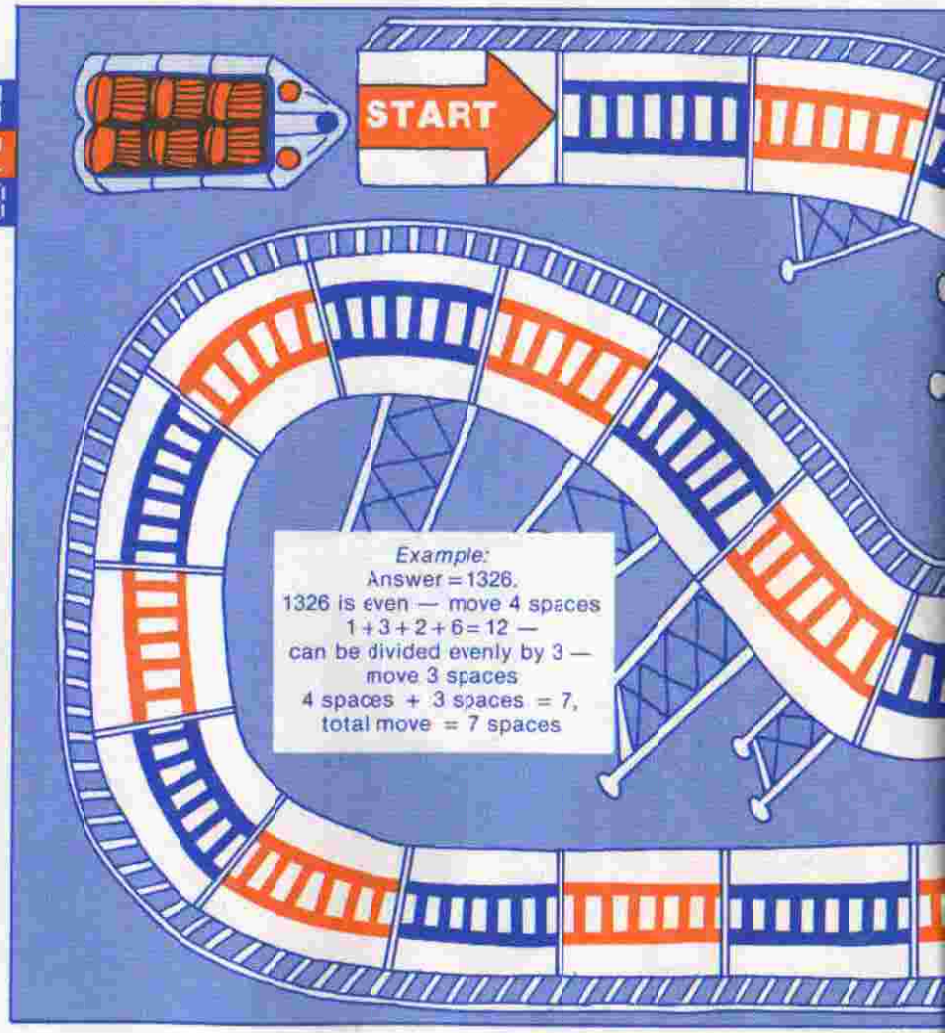
Ride the Loop-the-Loop. The first player to reach the end, WINS! Follow the rules below to move through the Loop-the-Loop. Your answer may fit more than one rule. Be sure to use all of your moves.

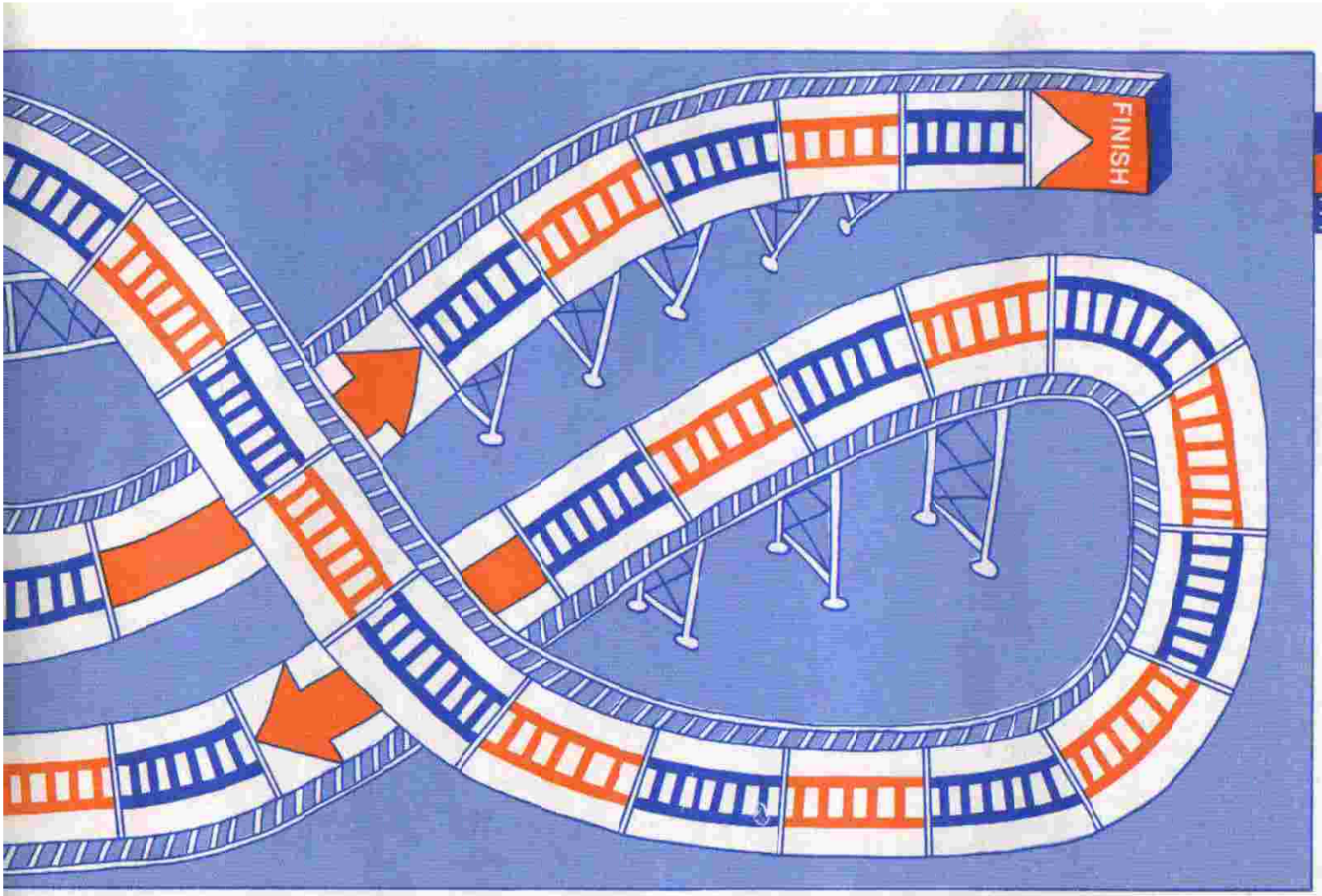
To play you need:

- two or more players
- markers for each player

To move, solve a "MIX IT" problem. If your answer is incorrect, do not move. If your answer is correct, use your answer and these rules to move.

1. If your answer is even (ends in 0, 2, 4, 6, or 8) move 4 spaces.
2. If your answer is odd (ends in 1, 3, 5, 7, or 9) move 3 spaces.
3. If your answer can be divided evenly by 5 (ends in 0 or 5) move 2 spaces.
4. If your answer can be divided evenly by 3 (digits add up to a multiple of 3) move 3 spaces.
5. If your answer can be divided evenly by 9 (digits add up to a multiple of 9) move 5 spaces.




FINISH

TAKE THE BANDIT TO JAIL

You've captured the bandit at the scene of the robbery. Can you get the bandit to jail?

To play you will need:

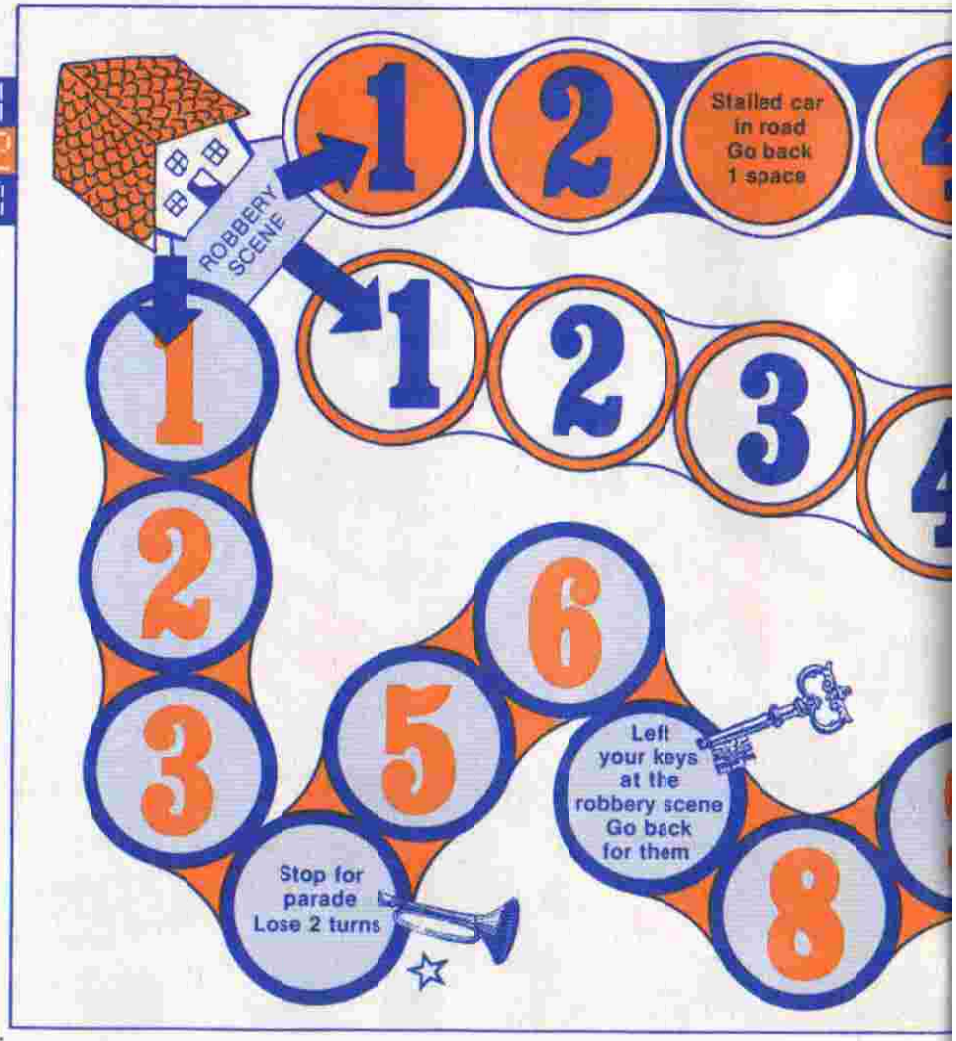
- two or more players
- a marker for each player

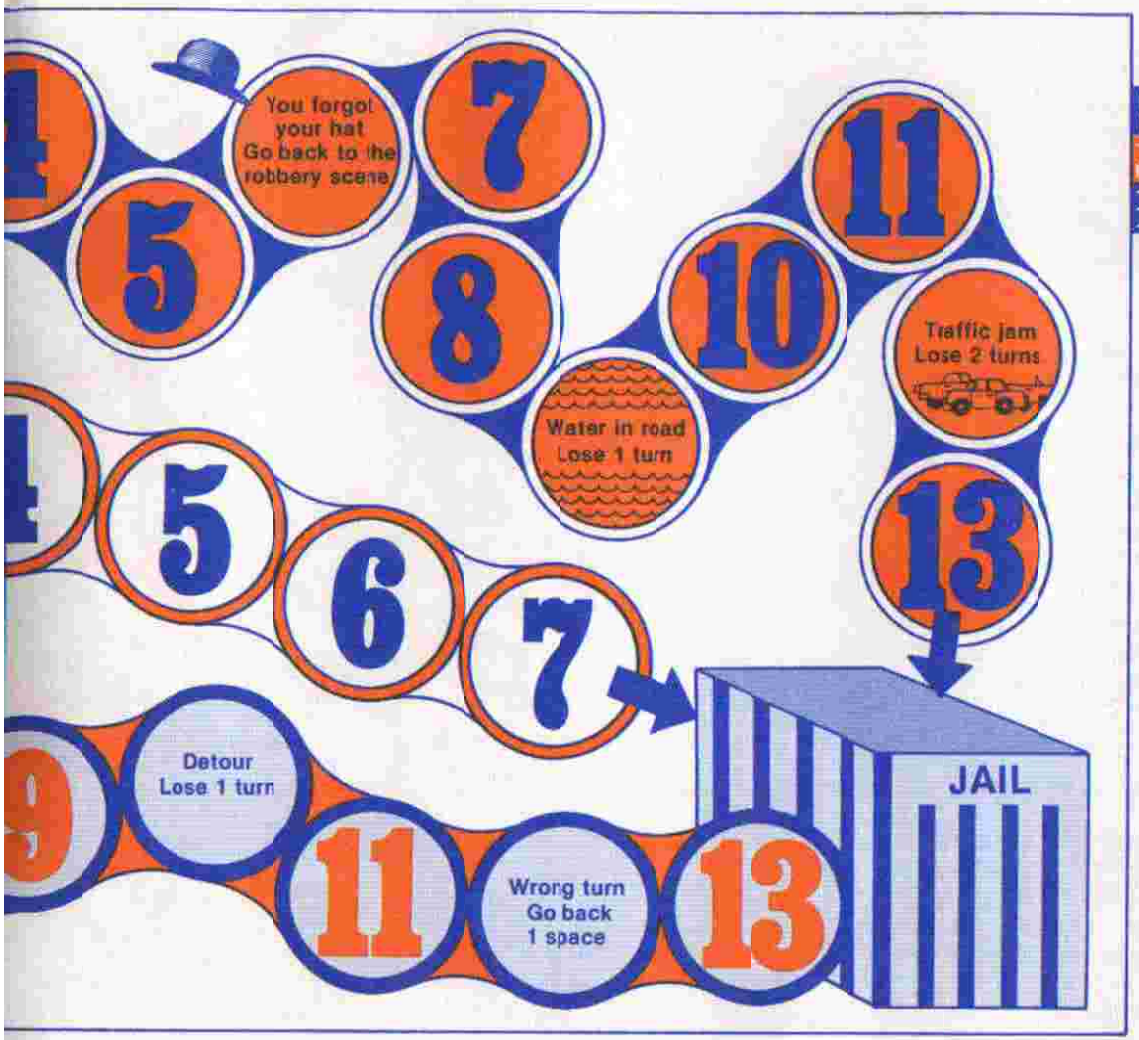
Place your markers at the robbery scene. Decide who goes first and take turns answering the problems. Press ON , 2nd WORD PROBLEMS, level (1 , 2 or 3) and GO .

Choose a path to take the bandit to jail.

- If you choose one of the LONG paths, you answer a problem. Add the digits of your answer until you have a one digit number. Move that number of spaces.
  For example, Answer = 268 (2 + 6 + 8 = 16, 1 + 6 = 7). Move 7 spaces. Work only one problem for each turn. When you land on a circle without a number, follow the instructions. Lose your turn if your answer is incorrect.
- If you choose the short path, you must answer one complete set of problems (5) correctly to move 1 space.

The first player to get the bandit to jail wins the game.









5.

What number am I? I have six digits and each one is the same. The next number has seven digits. *(answer on page 21)*

INFLATION! DEFLATION!

Three stores are trying to get your business.
The GREATER THAN STORE has the highest prices in town, but gives free stamps.
The LESS THAN STORE has lower prices, but also lower quality products.
The INFLATION FIGHTER STORE has the best buys.

Try to make the best buys. Each answer, correct or incorrect, counts as one purchase. After five purchases, the shopper with the most buys at the INFLATION FIGHTER STORE wins. You will need: • two or more players
• five markers (the same color) for each player

To play, decide who goes first and then take turns. To begin, press ON, ✕ GREATER/LESS, level (1, 2 or 3) and GO.

If your answer is correct, shop at the INFLATION FIGHTER store. Put one of your markers on your purchase in the INFLATION FIGHTER store.

If your answer is incorrect and should have been greater than, shop at the GREATER THAN store. Put one marker on your purchase in the GREATER THAN store.

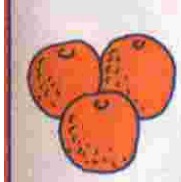
If your answer is incorrect and should have been less than, shop at the LESS THAN store. Put one marker on your purchase in the LESS THAN store.

Continue playing until all shoppers have made five purchases.

THE > GREATER THAN > STORE

 Two bananas	 ½ pound of cheese	 Two eggs	 ½ gallon of milk
 Three apples	 One small orange	 One slice of bread	 A 4 oz. can of mixed nuts
 One small can of corn	 One small head of lettuce	 One pound of steak	 A one-layer cake

THE INFLATION FIGHTER STORE


Three oranges


One dozen eggs



One gallon of milk


Six bananas


One pound of cheese



Two cans of corn


Seven red delicious apples


A three-layer cake


Three pounds of steak


One loaf of bread



A 12 oz. can of mixed nuts


Two heads of lettuce

THE LESS < < THAN STORE



One gallon of sour milk


One loaf of stale bread


One dozen eggs (3 are cracked)



One 12 oz. can of mixed nuts (when opened only half full)


Two bruised oranges


One crushed layer cake


Three banana peels



Two dented cans of corn


Three pounds of steak, beginning to spoil


One pound of cheese beginning to mold


One rotten apple


Two heads of lettuce beginning to turn brown

QUARKS

A QUARK is a very small particle. Quarks are still a mystery because not much is known about them. In this game you find the smallest number. It is a mystery what number you will find. You can play alone or with a friend.

To play, find the answer to a **NUMBER STUMPER** problem. Add the digits of your answer until you have the smallest number possible. If you solve Number Stumper correctly, subtract that number from 100. Add the number to 100 if you are incorrect. At the end of five rounds, the player with the smallest number wins.

To begin, press ON , # **NUMBER STUMPER**, level (1 , 2 , or 3) and GO . Decide who goes first. Take turns playing for five rounds.

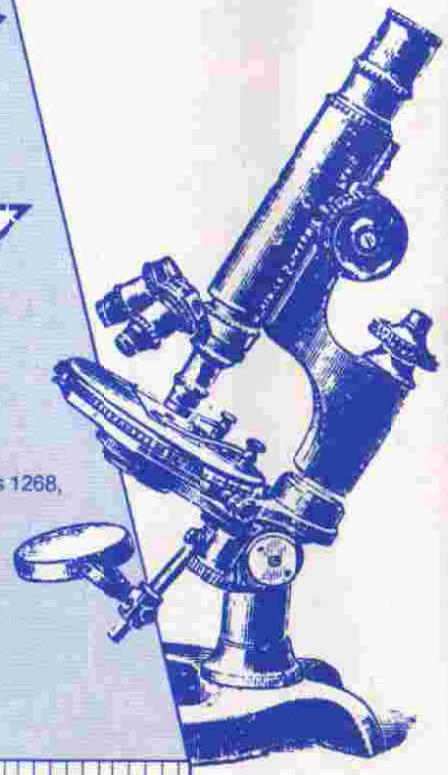
6. What is the largest possible seven digit number that has no two digits alike? *(answer on page 21)*

Score Sheet:

Round 1:
289 = 2 + 8 + 9 = 19;
1 + 9 = 10; 1 + 0 = 1;
100
– 1
99

Round 2:
24 = 2 + 4 = 6;
99
– 6
93

Example:
If the **NUMBER STUMPER** number is 1268, and you solve it correctly, add (1 + 2 + 6 + 8 = 17). Since 17 has 2 digits, add again (1 + 7 = 8). Then, subtract 8 from 100 (100 – 8 = 92). If you missed the **NUMBER STUMPER** number, add 8 to 100 (100 + 8 = 108).



DID YOU KNOW?

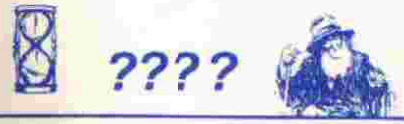
Work word problems **A** and **B** to have fun discovering things! Then sharpen your math skills with problems **C** through **N**.

The solutions are at the bottom of this page.
They are printed upside down.

A. How many minutes are in a year? There are 60 minutes in an hour and 24 hours in a day. There are 365 days in a year.



B. If you lived 80 years, how many minutes old would you be?



Answer C. Find the answer by a dot. Answer D. Find the answer by a dot. Connect the two dots. Keep answering and connecting dots until you've drawn a picture!

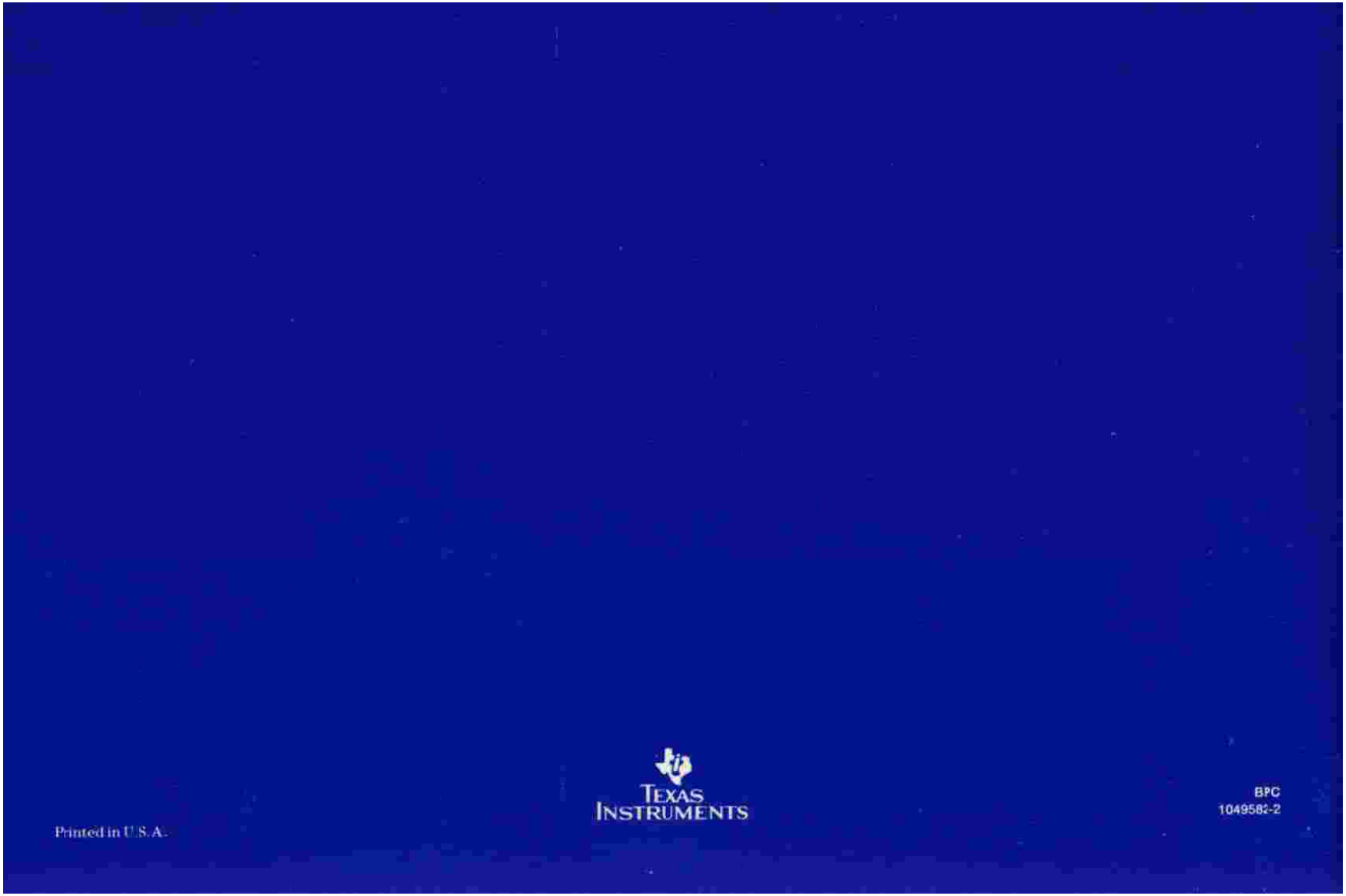
C. 2 + 4 + 6 + 8 =	**G.** 16 + 343 − 350 =	**K.** 10 ÷ 2 =
D. 78 + 23 =	**H.** 2 × 8 =	**L.** 99 ÷ 33 =
E. 20 − 13 =	**I.** 11 × 11 =	**M.** 30 ÷ 2 × 3 =
F. 130 − 99 =	**J.** 10 × 4 × 2 =	**N.** 84 ÷ 4 ÷ 7 =



SOLUTIONS: **A.** 60 × 24 × 365 = 525,600 minutes;
B. 525,600 × 80 = 42,048,000 minutes old;
C. 20; **D.** 101; **E.** 7; **F.** 31; **G.** 9; **H.** 16; **I.** 121; **J.** 80; **K.** 5; **L.** 3; **M.** 45; **N.** 3

ANSWERS

1. half-way, then it starts running out.
2. You should know you're driving!
3. yes
4. roosters don't lay eggs
5. 999,999
6. 9,876,543


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TEXAS INSTRUMENTS
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