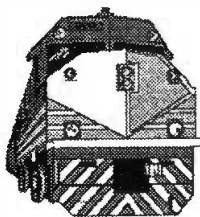


A Page of Problems

A. Craig Loewen

High School

Herb the Hobo is $\frac{3}{7}$ of the way across a railroad bridge when he hears a train whistle behind him. If he runs forward, he can jump off the bridge just in front of the train. If he turns around and runs back toward the train, he can also jump off the bridge just in front of the train. If the train is travelling at 35 km/h, how fast must Herb run?

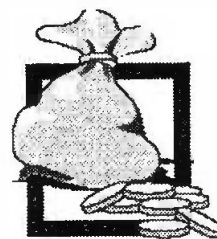


Source: C. Kantecki and L. E. Yunker, "Problem Solving for the High School Mathematics Student," in *Problem Solving in the Mathematics Classroom*, Math Monograph No. 7 (Edmonton, Alta.: MCATA, 1982), edited by S. Rachlin, 49–60.

Elementary

How many ways can you make up 55¢ using only nickels and dimes?

How many ways can you do so if you can use quarters, too?



Junior High

Substitute a different digit for each letter to make the following statement true:

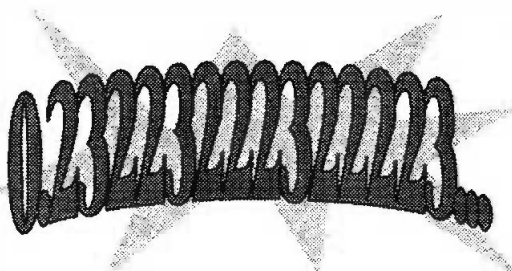


MATH
- **IS**
FUN

How many solutions can you find? How many solutions are there?

High School

In the following decimal, how many 2s are there before the 100th 3?



Source: M. A. Sobel and E. M. Maletsky, *Teaching Mathematics: A Sourcebook of Aids, Activities, and Strategies*, 2nd ed. (Englewood Cliffs, N.J.: Prentice Hall, 1988).

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Please submit problems for future issues to loewen@uleth.ca.