



## Problem of the Week

### Problem B

### Running Low on Gas

Driving home from a meeting late one evening, Ming notices that her gas gauge is showing that a mere  $\frac{1}{10}$  of a tank remains. Luckily, just then she spots a 24-hour gas station. She has just enough money to add 20 litres of gas to the tank, bringing her gas tank up to  $\frac{1}{2}$  full.

- (a) Given that the gas tank went from  $\frac{1}{10}$  full to  $\frac{1}{2}$  full, determine the fraction of the tank filled by the gas that Ming added. HINT: Use equivalent fractions.
- (b) The fraction of the tank you found in part (a) holds 20 L. How many litres are there in  $\frac{1}{10}$  of a full tank?
- (c) Given what you discovered in part (b), what is the full capacity, in litres, of Ming's gas tank?

