



## Problem of the Week

### Problem B

#### Frank Mixes Things Up

Frank wants to make a fruit punch drink for a family party. The recipe for his fruit punch drink is:

|                         |
|-------------------------|
| 500 mL cranberry juice  |
| 1.8 L orange juice      |
| 1450 mL pineapple juice |
| 350 mL ginger ale       |
| 2.4 L water             |

- (a) Frank has three different-sized containers: a 6 L jug, a 5700 mL jug, and a 6.8 L jug. Which jug(s) could Frank use to hold his fruit punch?
- (b) If the costs of his four flavoured drinks average to \$4.56 per litre, approximately how much will it cost Frank to make his fruit punch? Assume Frank does not need to pay for water.
- (c) There will be 31 family members at the party and Frank wants to make enough fruit punch so that each person can drink one cup (250 mL). Currently his recipe will not make enough fruit punch for everyone. Adjust the amounts of each ingredient in the recipe so that Frank has enough of his fruit punch drink for everyone, but not too much extra.

