



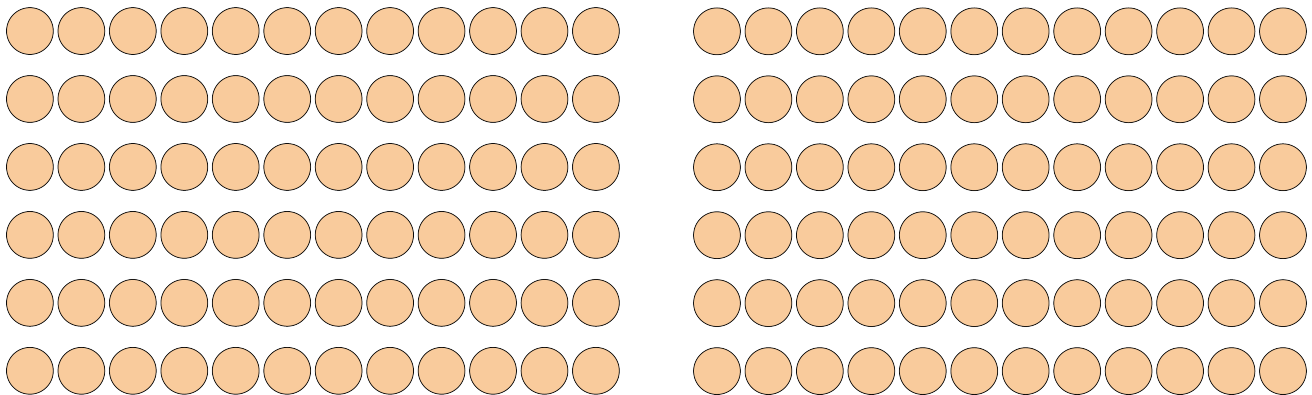
## Problem of the Week

### Problem A

### Graduation Ceremony

At Emily Carr Elementary School, the Grade 8 students are graduating and are having a ceremony. Tickets are given to the graduates and the school staff for free. Parents and other students need to buy tickets.

Staff set up 6 rows of 24 chairs in the gym. The diagram below shows the arrangement.



We know that

- $\frac{1}{3}$  of the chairs are filled with adults (parents/relatives) who bought tickets for \$4 each,
- $\frac{1}{4}$  of the chairs are filled with other students who bought tickets for \$2 each,
- $\frac{1}{6}$  of the chairs are filled with staff of the school, and
- the remaining chairs are filled with the graduates.

- (a) How many graduates are at the ceremony?
- (b) How much money was collected from ticket sales?

