



## Problem of the Week

### Problem B

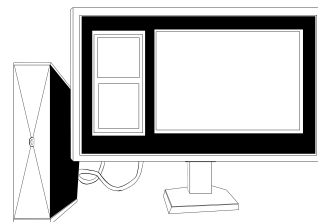
#### A Taxing Question

Sales tax is added to the price of most items or services that you purchase in Canada. The final price is calculated by finding the amount of sales tax, and adding this amount to original price.

However, the percentage of sales tax is not the same in all provinces.

- (a) The latest gaming console, the XStation PlayBox, sells for \$650. What would be the final price for this console in each of the provinces listed in the table below?

Province	Sales Tax	Final Price
Nova Scotia	15%	
Ontario	13%	
Saskatchewan	11%	
Alberta	5%	
British Columbia	12%	



- (b) Of the sales tax collected, 5% goes to the federal government, and the rest goes to the province. How much sales tax would the federal and provincial governments get for a console sale in Nova Scotia? What about in Alberta?

**EXTENSION:** Suppose that you live in British Columbia, but only 50 km from the nearest store in Alberta that sells the console. The price of gas is \$1.50 per litre, and your car uses 10 L of gas per 100 km of driving. Is it cheaper to drive to Alberta to buy the console instead of buying it in British Columbia?