



## Problem of the Week

### Problem B

### Server Satisfaction

You've just enjoyed a delicious meal at a restaurant with your friend. The cost of the meal before tax and tip was \$35.10.

- (a) Suppose the tax is 15% of the total cost. Estimate the dollar amount of tax using a mental math strategy. Then calculate the actual dollar amount of tax, and total cost including tax.
- (b) If you want to tip the server an additional 20% after tax, how much would you pay in total?
- (c) How much change would you receive if you paid with a \$100 bill?

**EXTENSION:** Suppose you are a server. In general, when would you rather receive a \$20 tip instead of 20% of your bill? Justify your thinking.

