

# Adding and subtracting decimals using menus

## Introduction

Students will apply their knowledge of adding and subtracting decimals by using an online food menu to simulate a real-world restaurant experience.

## Suggested time allowance

40 minutes

## Objectives

Students will:

- review and practice the process of adding and subtracting decimals.
- practice using decimal numbers in the context of a restaurant menu.
- use an online restaurant menu.

## Materials

- Classroom chalkboard or whiteboard
- Paper and pencils for the whole class
- Website: <http://www.sinbads.com/menu.htm>

## Procedures

1. Before beginning this activity, write the following on the board large enough so the class can read it:  
  
2. Main:  
Pizza Slice \$2.50  
\*Cheese Taco \$3.00  
  
Side:  
Onion Rings \$1.75  
\*French Fries \$2.00  
  
Beverage:  
\*Soda \$ .75  
Juice \$ .45  
  
Dessert:  
Cookie \$.25

Put stars next to the items as they are above. Ask a student volunteer to join you up at the front of the classroom. Tell the class that you are pretending to be a waiter and that your volunteer is pretending to be a customer. Whisper in your volunteer's ear that she/he should order the items with stars next to them. As the items are read aloud, write the price of each item on the board, and then add them together, reviewing the adding process.

3. Your answer will be \$5.75. Now tell the class that your customer only has \$5.00. Have the class help you and the customer subtract an item from the total, and add another until you have a main dish, side dish, and beverage that the customer can afford.
4. Repeat the same steps with a new volunteer, except have your customer order the items that do not have stars except for the cookie. After you add up the prices, subtract the total from \$5.00, review the subtracting process, and then ask the class if the customer can afford the cookie.
5. Now ask the class to get in pairs. Explain that each person in the pair will get to be both a customer and a waiter. At a computer, each pair should go to the following website:

### **Extension Activities**

- Students could be given more money (say \$20) and be asked to buy dinner for their family.
- Introduce the process of multiplying decimals by demonstrating the concept of sales tax.
- Have students collect prices of everyday food items the next time they visit the grocery store. Or find prices online at (<http://www.yourgrocer.com>) Give the students a budget and have them add and subtract items from their cart in order to stay under budget. Provide nutrition guidelines and ask them to use these to help make their purchasing decisions.

### **Additional Web resources:**

6. Standards correlation  
Students will:
  - develop a concept of decimals.
  - develop number sense for decimals.
  - apply fractions and decimals to problem situations.
- 7.

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Source:

