Menu Math
15 Super-Fun Reproducible Menus With Skill-Building Worksheets That Give Kids Practice in Multiplication, Division, Money, Fractions, Estimation, Problem Solving, and More

By Martin Lee and Marcia Miller

Connects Reading and Math!
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Remembering Kathy Baker and her hearty appetites.
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Dear Teacher,

Can you remember how exciting it was when you were young to go to a restaurant and select whatever you wanted from a broad menu of choices? To order something different from what others were eating, or from what you’d normally eat at home? It’s exciting for kids to make choices, and to imagine they can select whatever they’d like. *Menu Math* offers this—and more.

*Menu Math* provides a variety of menus geared to students in the middle elementary grades. Some of the menus are straightforward, while others are whimsical or downright silly! Each menu affords students the chance to apply mathematical skills and thinking to a lifelike situation.

As students interpret and manipulate the data presented in the menus, they will extend their mathematical understanding, communicate mathematically, and develop positive attitudes toward applying math in the real world. Students will fill out order forms. They will compare and contrast prices, estimate and compute with money amounts, fractions, and percents, and determine change, tips, and tax. They will list possibilities and find probabilities. Throughout, they will find and use patterns, look for number relationships, use logical reasoning and problem-solving strategies, and apply number sense. Using *Menu Math* can help students extend mathematical thinking into the worlds of nutrition, science, language, social studies, fantasy, and in any other direction their imaginations—and yours!—can take them.

Incorporate *Menu Math* into students’ workday to support and enhance your math curriculum. Use it as a fun-Friday kind of activity, to stimulate role-playing opportunities, and as a springboard for communication, research, or cross-curricular projects. However you use Menu Math, *bon appétit*!

—Marcia Miller and Martin Lee
Using This Book

Use the menus, questions, teaching tips, and reproducibles in any way that suits your teaching style, classroom goals, and students' skill levels and learning styles. Here are some suggestions:

- Duplicate the menus onto colored paper (different colors for different menus). If possible, laminate or put them inside plastic sleeves to help them last.

- Take time to go over the menus with students. Help to familiarize them with the kinds of information, language, organization, and price structures they will encounter.

- Use any or all of the questions that follow each menu. Make up similar questions, or invite students to do so.

- Duplicate the order form on page 58 so that students can record their orders or pretend to wait on classmates.

- Use the menus as class work, homework, or project work. Invite children to add items to the menus. Encourage them to create their own menus, using the menu template on page 59 (create double-sided copies for each student).

- For questions with multiple answers, allow students time to share their findings and solution methods with the class or in groups.

- Provide calculators students can use as cash registers to verify totals, to determine tax and tip (see page 62), or to aid in computation of greater numbers.

- Maintain a menu collection (in a box or folder or on a bulletin board) gathered from local restaurants and take-out places. Invite students to “order in” from time to time, using play money. Role-play the phone call they would make to place the order.

- Provide copies of the Restaurant Review form (page 61) that students can fill out from time to time after they visit local eateries. Compile the reviews in a binder. Encourage students to refer to these forms for restaurant recommendations.

- Take a moment to reinforce proper behavior and comportment at a restaurant.
Teaching Tips

Try these teaching ideas and strategies as you experience each menu!

**America Eats!**
- Review reading and ordering in money amounts, as needed.
- Review rounding money amounts to the nearest dollar to make estimates.
- Invite students to suggest favorite regional specialties from across the country that they would add to this menu.
- Invite students to come up with their own catchy e-mail address for the restaurant.
- Extend by giving students a money amount, such as $25, to spend on a meal of their choice. Ask them to record their order and the cost of that order. Have students determine how much change they will get.

**Best Foot Forward**
- Review customary linear measures, as needed. Remind students that 3 feet = 1 yard.
- Have students examine the two lists of foods. Ask them to explain why some foods are listed as “longs” and others as “shorts.” Invite them to suggest foods that might be added to each list.
- Ask students what they think of this way of categorizing foods.
- Plan a class party. Have students choose the foods from the menu to place an order large enough for the whole class. Ask them to explain how they arrived at the amounts of each food needed. Have them give the total price of the party foods.
- Point out the comments of the food critics. Discuss what a food critic is and how critics do their job. Invite students to add their own comments to those shown.

pages 12-14

pages 15-17
Home on the Range

- Review the meaning of each of the four operations. Discuss ways to determine which operation(s) to use to solve a problem. Provide practice in choosing the operation, using data from this menu.
- Invite students to suggest “cowboy foods” to add to the menu. They can also suggest an alternative to “Grub That Sticks to Yer Ribs, Pardner!”
- Have students suggest other idioms to replace those that identify the different food categories on the menu.
- Ask students to imagine what might be in each of the cook’s specials.
- Extend by helping students learn more about the life of cowhands on cattle drives. What did cowboys really eat while on a drive?

Lunch and Dinner

- Review how to use fractions to express parts of a set. Ask: What fraction of the starters should be served hot? or What fraction of the main courses at lunch cost less than $6?
- Some restaurants do indeed have different lunch and dinner menus in which the same dishes, although not in the same portion sizes, are served at both meals. If possible, bring in examples of these related menus.
- Have students choose a meal from the lunch or dinner menu and order an item from each part of that menu. Ask them to tell a friend what they ordered and what it cost, and then ask that friend to figure out whether they are having lunch or dinner.
- Extend Set 1 by having students use percents rather than fractions to express comparisons of food prices and the number of items in each category. Ask additional questions of this type.

Space Foods

- Review (for Set 2) the meaning of discount. Ask students to suggest reasons that restaurants offer discounts. Brainstorm a list of common kinds of diner discounts (early-bird specials, pre-theatre dinners, holiday meals, daily lunch specials, two-for-one, and so on).
- As appropriate for your class, use percents rather than fractions to express the discounts given.
**Tastes of Asia**
- Review rounding and estimating money amounts.
- Help students pronounce some of the items on the menu. If you have any Thai or Vietnamese speakers in the class, invite their assistance.
- Bring in menus from local Asian restaurants. Guide students to look for common elements within each cuisine. For example, is seafood a focus? Are peanuts commonly used? Guide them, too, to compare cuisines and to spot dishes and ingredients common to different cultures.
- Bring in rice noodles, lemongrass stalks, and other Asian food items from a specialty market to show students.
- Extend by asking questions that involve the take-out menu. For these questions, you can incorporate tips (at 10%, for example) for the delivery person. Discuss other ways in which ordering take-out food differs from ordering in a restaurant.

**P.S. I Love You**
- Review finding fractions of a set, and comparing fractions, as needed.
- Review the meaning of percent and the relationship between fractions and percents.
- You might use this opportunity to have students begin to learn and recognize the percents equivalent to common fractions like \(\frac{1}{2} = 50\%\), \(\frac{1}{4} = 25\%\), \(\frac{3}{4} = 75\%\), \(\frac{1}{3} = 33\frac{1}{3}\%\), and \(\frac{2}{3} = 66\frac{2}{3}\%\).
- Invite students to come up with other P and S foods to add to the menu, or to create a new menu featuring two other letters.
- Use the menu as an alphabetizing tool by having students put the foods in each part of the menu in alphabetical order.
- Extend by challenging students to formulate additional questions similar to question 6 in Set 2. Ask them to provide answers and to explain how they formed their questions.

**The Hungry Hound**
- Make sure students have ample time to read and remark on the silly foods on this menu. Ask them to identify foods their pets would enjoy and to suggest foods to add to the menu.
Review strategies for using mental math to find sums and products. Then give students practice grouping addends, changing orders of addends and factors, and using compatible numbers. Discuss the usefulness, in real-life situations, of being able to compute mentally.

Refer students to the critics’ remarks. Invite them to add their own comments.

Guide students to notice that this restaurant is called a café. Have them brainstorm a list of all the different ways to name restaurants.

The Sweet Tooth

For Set 1, students will need to list food choices and combinations of food choices. As needed, review how to make an organized list to identify all possible outcomes. Alternately, you might explain how to make and use tree diagrams to represent all outcomes.

You may wish to introduce your advanced students to the fundamental counting property: If there are \( m \) choices for the first decision, and \( n \) choices for the second decision, then there are \( m \times n \) choices for the first decision followed by the second decision. Using this property, students can quickly ascertain, for example, that if there are 5 choices for dessert and 3 choices for toppings, then there are 5 x 3, or 15 possible dessert-topping choices.

In Set 2, students work with the statistical measures of range, mean, median, and mode. Review these measures, as needed. Explain that in some instances the mean, median, and mode are the same number. Find examples together.

Extend by having students discuss circumstances in which each measure of average (mean, median, or mode) would be most useful to the owner of a restaurant.

Invite students to describe and share recipes for their favorite desserts.

The Fishing Hole

Review multiplying with decimals, and multi-step problems that involve multiplying and either adding or subtracting. As needed, review the order of operations as well as ways to remember that order.

In Set 2, students find the total cost of food orders, including tax. Discuss the meaning of sales tax. Inform students that this tax varies from community to community in America, that it is expressed as a percent, and that it usually is less than 10%.
Simply Awful!

- Give students time to enjoy the silliness of the items on this menu!
- Review and practice how to use number sense and the problem-solving strategy of guessing and testing to find a missing number. Discuss additional clues to look for to solve problems like those in the first set, such as determining which digit needs to be either in the cents place or dollars place.
- Review how to find a percent of a number. Invite students to use calculators, particularly for the problems whose answers call for prices to the nearest cent.
- Extend by inviting students to make their own menus of awful foods. Challenge them to make their dishes creative as well as disgusting!

Juice Bar

- Help students to understand all the information in this complicated menu. Ask questions to clarify any confusion. You may wish to ask students to write a brief summary of the information presented.
- Discuss what a smoothie is and how it differs from juice or from a milkshake.
- Review how to find a fraction of a number and how to express a fraction in simplest form, as needed. Discuss how to know whether a fraction is in simplest form.
- Invite students to come up with a catchy sales slogan for this restaurant or a new name for it.
- Extend by having students create questions of their own for classmates to solve using information on the menu.

High-Price Harry’s

- Are these prices very high? Compare them with prices on the menus you’ve collected and with what you’ve learned from the dining-out experiences you and your students have had.
- Discuss the practice of tipping servers in a restaurant. Talk about why people tip and what percent is commonly used to determine the amount of a tip. Talk about and demonstrate ways to use estimation to come up with reasonable tips.
- Have students explain how they got their answers to the multistep problems in these sets.
Discuss how to use number sense and mental math to find 10%, 5%, and 20% of a number. Provide practice. For example, ask, What is 10% of $16? ($1.60) Then ask, What is 5% of $16? What is 20% of $16? ($0.80; $3.20) Have students explain how they arrived at their answers.

Invite students to come up with their own description to replace the one given beneath the restaurant’s name.

**Pizza People**

- Help students understand all the information on this menu. Compare it to take-out pizza menus in your class collection. How is it similar to the others? In what ways does it differ?
- For Set 1, review the problem-solving strategy of working backwards.
- For Set 2, review how to use an organized list or a tree diagram to find the number of possible outcomes. Guide more advanced students to use multiplication (the fundamental counting property) to find the number of possibilities in each case.

Have students create their own pizza menus. They can choose toppings as well as pizza sizes and shapes of their choice. They should also provide prices. Encourage students to make up a name for the restaurant and to come up with a catchy replacement for the phone number at the bottom.

**The Whole Enchilada**

- Help students understand the information in the menu. Guide them to grasp, for example, that there are 36 different ways to have a wrap (as is, deep fried, or enchilada style). Discuss that an enchilada-style wrap has cheese melted on top and comes covered with sauce.
- Review how to find the number of possible outcomes, as needed.
- Review and discuss the meaning of probability (the number of favorable outcomes divided by the number of possible outcomes) and how to find the probability of an event. Ask questions to gauge students’ understanding: You choose a topping for your wrap. How many toppings are there? (5) You pick one at random. What is the probability that you will pick salsa? (1/5)
- Help students understand that some outcomes are impossible (a probability of 0), while others are certain (a probability of 1).
- Extend by inviting students to formulate their own problems that deal with finding probabilities. They can use the information on this menu or they can create menus of their own.
## Favorite Foods From Across the Country

### Firsts and Sides
- Iowa Corn Cakes: $2.00
- New Orleans Gumbo: $3.25
- New England Chowder: $2.95
- Idaho Potato: $1.29
- Boston Baked Beans: $2.29
- New Jersey Tomato Salad: $2.00
- Charleston Chicken Fingers: $3.00
- Alaska Crab Salad: $4.59

### Main Courses
- Kansas City Steak: $10.95
- Texas Barbecue: $8.00
- Louisiana Jambalaya: $8.95
- Maine Lobster: $12.75
- Maryland Crab Cakes: $9.50
- Carolina Catfish: $7.95
- Arizona Chili: $6.95
- Philadelphia Cheese Steak: $6.95

### Drinks
- Florida Orange Juice: $3.00
- Vermont Apple Cider: $2.00
- New York Egg Cream: $2.00
- Wisconsin Buttermilk: $1.00

### Desserts
- Mississippi Mud Cake: $4.25
- New York Cheesecake: $5.25
- Florida Key Lime Pie: $4.25
- Georgia Peach Pie: $4.65
1. Which main courses cost more than $8 but less than $10? _______________________________________________________
   Which desserts cost more than the Alaska Crab Salad? _______________________________________________________
   _______________________________________________________________________________________________

2. Ernie orders the catfish and an egg cream. How much does his meal cost? _______________________________________

3. Sally orders chicken fingers, chili, peach pie, and cider. How much does her meal cost? ___________________________

4. Frank has $15. Can he afford chowder, jambalaya, and cider? Explain. _______________________________________
   _______________________________________________________________________________________________
   _______________________________________________________________________________________________
   _______________________________________________________________________________________________

5. Anna has $14. She orders barbecue and buttermilk. Does she have enough money left to order a dessert? Explain. 
   _______________________________________________________________________________________________
   _______________________________________________________________________________________________
   _______________________________________________________________________________________________

6. Art has $12. Is that enough to pay for an Idaho potato, a cheese steak, and a cheesecake? Explain. 
   _______________________________________________________________________________________________
1. Tim orders the most expensive item from each part of the menu.
   What is the total cost of his meal? ____________________________

2. Sue orders the least expensive item from each part of the menu.
   How much less than Tim does she spend? _________________________

   He orders crab cakes and a drink.
   Which drink does he order? ___________________________________

4. Samantha spends $19.45. She orders the gumbo, the steak and a dessert.
   Which dessert does she order? _________________________________

5. Dave spends $21.40. He orders corn cakes, lobster, cider, and a dessert.
   Which dessert does he order? _________________________________

6. Mia spends $11.95. She orders a main course and a drink.
   She doesn’t like buttermilk.
   Which main course and drink does she order? ___________________
Take-Out Foods Sold by Length!
Ten Miles Sold Each Day!

**LONGS***
- Long Hot Dog ................. $2.00
- Sub Sandwich ................. $3.00
- Cucumber .................... $1.00
- Spaghetti ................... $0.25
- Salami or Pepperoni ....... $1.50
- Pretzel Stick ............... $0.25
- Celery ....................... $0.20
- Licorice Laces ............. $0.40
- Zucchini ................... $0.25
- French Bread ............... $1.00

*All prices are for 1 foot.

**SHORTS**
- Carrot ....................... $0.15
- Green Bean ................. $0.15
- Wax Bean ................... $0.20
- Asparagus ................ $0.35
- Pickle ....................... $0.10
- Cruller ..................... $0.40
- Turkey Sausage .......... $0.75
- French Fries ............. $0.50
- Burrito .................... $0.75
- Egg Roll .................... $0.60

**All prices are for 1/2 foot.

THE FOOD CRITICS LOVE US.
HERE'S WHAT THEY SAY:
- "I'd walk a mile for this food!" — Tabitha Tastebud
- "The food is tops, and that's the long and short of it!" — Dan Diner
- "The chef goes to great lengths to please!" — Phil Myplate
1. Which one of the “longs” costs the most per foot?
_______________________________________________________________________________

2. Which one of the “shorts” costs the least per $\frac{1}{2}$-foot?
_______________________________________________________________________________

3. What would you pay for 2 feet of pepperoni?
_______________________________________________________________________________

4. What would you pay for 3 feet of carrots?
_______________________________________________________________________________

5. You order 2 feet of zucchini and 2 feet of asparagus.
What do you pay? ________________________________________________________________

6. You have a party. You order 4 feet of salami, 12 feet of French bread, and 4 feet of pickles.
What is the total cost? ____________________________________________________________
1. Two friends share a 2-foot pretzel stick. They share the cost, too.
   How much does each pay? ________________________________

2. You order 3 feet of spaghetti and a half foot of turkey sausage.
   How much does it cost? ________________________________

3. How much licorice do you get if you spend $4 on licorice laces?
   ____________________________________________________________________

4. You spend $3 on egg rolls.
   How much egg roll do you get? ________________________________

5. You order 1 yard of hot dog and half a yard of cruller.
   What do you pay? ________________________________

6. Dee orders 5 feet of a “long.” She spends $2.
   What does she order? ________________________________

7. You have $5. Place an order of foods you enjoy. Choose longs and shorts.
   ____________________________________________________________________
**Grub That Sticks to Yer Ribs, Pardner!**

**Git Started/Sides**
- Biscuits ................. $2.50
- Redeye Gravy .......... $1.95
- Cactus Salad .......... $3.25
- Beans (rookie portion) .......... $2.50
- Beef Jerky .......... $2.00
- Taters .......... $2.25
- Corn Fritters .......... $1.85

**Fill 'er Up**
- Big ol' Steak .............. $10.00
- Beans (cowboy portion) .......... $5.00
- Canyon Chili .......... $6.00
- Prairie Stew .......... $7.50
- Buffalo Burger .......... $6.00
- Cook's Special Surprise .......... $8.50
- Hay or Oats* .......... $1.00

*Yer horse has to eat, too, buckaroo!

**Fer Yer Sweet Tooth**
- Apple Pie ................. $3.00
- Cherry Pie .......... $3.00
- Lefty's Peach Pie .......... $4.00
- Shorty's Rhubarb Pie .......... $4.25
- Dodge City Donut .......... $1.00
- Bunkhouse Brownie .......... $2.00

Add $2 for real whipped cream.

**Wet Yer Whistle**
- Buck's Buttermilk .......... $1.00
- Laramie Lemonade .......... $1.50
- Cowpoke Cooler .......... $2.95
- Rustler's Root Beer .......... $2.45
- Bitter Black Coffee .......... $1.00
- Trough Water* .......... free

*Yer steed can build up a thirst!

**ASK COOK ABOUT OUR**
**CATTLE DRIVE DINNERS, LONGHORN LUNCHES, AND SADDLEBAG SPECIALS. WHEEE-HAH!**
1. You want to know the cost of a side and a sweet.
What operation do you use? Explain. _________________________
_______________________________________________________________________________

2. You have $10 to spend. Your order comes to more than that. You want to know how much to borrow from your friends to pay for your meal.
What operation do you use? Explain. _________________________
_______________________________________________________________________________

3. You order taters, a steak, and buttermilk. You want to know how much change you’ll get from a $20 bill.
What operations do you use? Explain. _________________________
_______________________________________________________________________________

4. You order food for a group of cowboys. You want to know the difference in price between four orders of chili and four orders of stew.
What operations do you use? Explain. _________________________

5. You and two rodeo buddies share the cost of a meal of steak, beans, root beer, and peach pie.
Explain what you do to figure out what each person pays. _______________
_______________________________________________________________________________
_______________________________________________________________________________

6. Make up a problem using the information on the menu. Ask a classmate to read your problem and tell what operations he or she would use to solve it.
_______________________________________________________________________________
_______________________________________________________________________________
1. You order a buffalo burger and a brownie. Your friend orders chili and a root beer.

Who pays more? ____________________________________________________________

How much more? ____________________________________________________________

2. You’ve been out on the range for days. You’re so hungry that you could eat a horse. So you order a big ol’ steak, a cowboy portion of beans, biscuits, lemonade, and two slices of cherry pie.

How much does this feast cost? _____________________________________________

3. Slim orders beef jerky, Cook’s special surprise, and a drink. He spends $13.45.

What drink does he wet his whistle with? ______________________________________

4. Li’l Liza orders prairie stew, black coffee, and a sweet. She pays with a $10 bill and a $5 bill. Her change is $2.25.

Which sweet does she order? _________________________________________________

5. You order food for the whole bunkhouse crew. You order 6 portions of the following: beef jerky, buffalo burger, and buttermilk.

What’s the total cost? ________________________________________________________
LUNCH*

STARTERS
Onion Soup .................. $ 2.25
Chef’s Salad ................. $ 3.75
Shrimp Cocktail ............. $ 5.50
Chips and Salsa ............ $ 3.00

MAIN COURSES
(includes small salad)
Meatloaf .................... $ 6.50
Roast Chicken ............... $ 5.75
Hamburger ................... $ 2.75
Catch of the Day ............ $ 5.95
Pasta of the Day ............ $ 6.25
Vegetarian Lasagna ........ $ 6.00

DESSERTS
Ice Cream ................... $ 1.50
Assorted Cookies .......... $ 1.25
Fruit Pie ..................... $ 2.25
Fresh Seasonal Fruits ..... $ 1.50

DINNER

STARTERS
Onion Soup .................. $ 2.95
Chef’s Salad ................. $ 4.75
Shrimp Cocktail ............. $ 7.00
Chips and Salsa ............ $ 4.00

MAIN COURSES
(includes potato & vegetable)
Meatloaf .................... $ 8.00
Roast Chicken ............... $ 6.95
Hamburger ................... $ 4.00
Catch of the Day ............ $ 7.50
Pasta of the Day ............ $ 7.95
Vegetarian Lasagna ........ $ 7.00

DESSERTS
Ice Cream ................... $ 2.00
Assorted Cookies .......... $ 1.50
Fruit Pie ..................... $ 2.75
Fresh Seasonal Fruits ..... $ 2.00

* Lunch portions are smaller than dinner portions. But they taste just as good!
1. Which portions cost more—lunch portions or dinner portions? ____________________________
   Why? _______________________________________________________________________

2. What is the difference in price between lunch meatloaf and dinner meatloaf? _______________
   What other item on the menu has that same difference in price from lunch to dinner? _______________

3. Which dishes cost $1 more at dinner than they do at lunch? _______________________________

4. Write a fraction to compare the number of starter items with the number of main course items on either menu.
   __________________________________________________________________________

5. Write a fraction to show how the price of chips and salsa at lunch compares with the price of that item at dinner.
   __________________________________________________________________________
1. Ellen spends $10.90 on onion soup and pasta.
   Is she having lunch or dinner? ________________________________

2. Ralph spends $13.50 on shrimp cocktail, meatloaf, and ice cream.
   Is he having lunch or dinner? ________________________________

3. Sean orders roast chicken and pie.
   His change from a $10 bill is $2.
   Is he having lunch or dinner? ________________________________

4. For lunch, Rose orders the chef’s salad, lasagna, and a dessert.
   She spends $12.
   Which dessert does she order? ________________________________

5. Rick orders a starter, a hamburger, and pie. He pays $10.75.
   Is he having lunch or dinner? ________________________________
Foods to Please Extraterrestrial Eaters

**FIRSTS AND SIDES**
- Corn Orbs $200
- Rocket Pocket $200
- Star Salad $250
- Globe Gobbles $250
- Neptune Nibbles $100
- Lunar Chips $100
- Gravity Gravy $200

**MAIN COURSES**
- Space-Dusted Snapper $400
- Apollo Mission Meatloaf $300
- Satellite Stew $350
- Chicken Galileo $400
- Saturn Supper $500
- Eggplant Eclipse $250
- Venusian Veal $600

**DESSERTS**
- Moon Pie $150
- Mercury Bar $150
- Asteroid Attack $200

**DRINKS**
- Supernova Surprise $250
- Stellar Sunrise $100
- Comet Cooler $100
- Spectrum Spritzer $125
- Galaxy Gulp $150

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**OUR PRICES:**
They may seem astronomical. But hold your helium!  
Our portions are the biggest in the universe.

**TAKEOUT:**
All deliveries FREE in our solar system.  
Add $100 for deliveries elsewhere in the galaxy!
1. Gorf, from Venus, orders lunar chips and a Saturn supper. How much is the meal? ____________________________

2. Blool, a Neptunian, has a travel allowance of $750 per meal. She orders globe gobbles, satellite stew, and a comet cooler. Does she have enough money left over to order a dessert? ______________

3. You and three friends share the cost of a huge space meal. You order a star salad, the chicken, a galaxy gulp, and an asteroid attack. How much does each of you pay? ____________________________

4. The following home-delivery order came in from Mars: 5 rocket pockets, 4 Saturn suppers, 2 Venusian veals, 5 galaxy gulps, and 3 Mercury bars. How much is the total bill for this Martian order? ______________

5. Creexon orders 4 space-dusted snappers along with 4 stellar sunrises. His friend from Jupiter has 5 orders of Apollo Mission meatloaf and 5 spectrum spritzers. Whose bill is greater? ____________________________ How much greater? ____________________________

6. Put together a meal for you and a group of friends. What do you order? What is the total price? ____________________________
1. On Monday, all Martians can eat for 1/2 off the regular prices.
What does a Martian pay for gravity gravy on Monday?
________________________________________________________

2. On Tuesday, all Venusians get a half-off discount.
How much does a meal of satellite stew with a moon pie cost visitors from Venus on Tuesday?
_________________________________

3. On Wednesday, all main courses cost 1/5 less than they regularly do.
How much less does a Saturn supper cost on Wednesday than on other days?
_________________________________
What is the price of that main course on Wednesday?
_____________________

4. On Thursday, anyone who lives on a moon can get lunar chips for 1/4 of their regular price.
How much does a moon resident pay for 5 orders of the chips?
__________

5. On Friday, Earthlings get a break. They either pay 2/3 of what a dish normally costs or they pay 4/5 off the regular price.
Which is the better deal? Explain.
________________________________________
_________________________________________________________________________

6. You are most likely an Earthling. It’s Friday, so you can use your special discount. Make a dinner order from the menu. Choose the better of the two discount deals described.
What items do you choose?
_______________________________________________
What do you pay?
________________________________________________________
Dishes From Thailand and Vietnam

**STARTERS FROM THAILAND**
- Tom Yum Gung ...........$3.00  
  Lemongrass Soup
- Po Pia ..................$2.49  
  Vegetarian Roll
- Tod Mun Pla .............$4.00  
  Spicy Fish Cakes
- Salad Kaek ..............$3.55  
  Green Salad and Bean Curd

**THAI MAIN COURSES**
- Pad Thai .................$7.00  
  Thai Rice Noodles With Peanut Sauce
- Khao Soi ..................$7.29  
  Egg Noodles With Curry Chicken
- Pad Ruom Mitt ...........$5.75  
  Mixed Vegetables and Bean Curd
- Gai Ta Krai ..............$6.50  
  Chicken Breast With Lemongrass
- Nua Nam Mun Hoy .......$8.25  
  Beef, Black Beans, Oyster Sauce
- Pla Jean ..................$8.59  
  Salmon With Thai Spices

**STARTERS FROM VIETNAM**
- Canh Chua ...............$3.25  
  Hot and Sour Seafood Soup
- Cha Gio ..................$2.75  
  Spring Roll With Shrimp and Pork
- Rauca Nuong .............$3.50  
  Grilled Vegetables With Peanut Sauce
- Goi Ga ....................$3.95  
  Chicken Salad With Vegetables

**VIETNAMESE MAIN COURSES**
- Bun Xao ..................$6.75  
  Stir-Fry Rice Noodles With Shrimp
- Ga Ro Ti ..................$5.95  
  Roast Chicken With Barbecue Sauce
- Bo Luc Lac ................$6.00  
  Marinated Cube Steak
- Xuong Nuong .............$6.50  
  Grilled Marinated Pork Chops
- Ca Chien ..................$8.00  
  Fried Crispy Whole Fish
- Cha Tom ....................$7.50  
  Panfried Shrimp Cake

Ask for our take-out menu.  Free delivery!
1. Which Thai starter costs less than $3? ________________________________
Which Vietnamese main courses cost more than $6 but less than $7? ________________________________

2. Which Vietnamese starters round to $3 when rounded to the nearest dollar? ________________________________

3. Which Thai starters round to $3 when rounded to the nearest dollar? ________________________________

4. Toby orders a Thai main course. It rounds to $8 when rounded to the nearest dollar. Which main course does he order?

5. Which two Thai appetizers together cost less than $6? ________________________________

6. Jared orders a Vietnamese main course and starter. He pays $11. What does he order? ________________________________
1. You’d like to try the Thai dishes Po Pia and Gai Ta Krai. You have $9.
   Do you have enough money? _______________________________

2. You order the Vietnamese dishes Goi Ga and Bun Xao. You pay with a $10 bill.
   Is that enough money? _______________________________

3. Claire orders two Thai main courses.
   The total price is between $16 and $17.
   Which two dishes does she order? _______________________________
   _______________________________________________________________________

4. Rachel calls in a take-out order. She orders a Thai starter and main course and a
   Vietnamese starter and main course. The total falls between $16 and $20.
   Give an order she might have called in. _______________________________
   _______________________________________________________________________

5. Create an order of dishes that rounds to $20 when each item in your order is
   rounded to the nearest dollar.
   List the items you order. _______________________________
   _______________________________________________________________________
### Starters/Sides

- Pea Soup: $2.75
- Pear Salad: $3.25
- Pork Sausage: $2.25
- Potato Salad: $2.00
- Potato Soup: $2.50
- Papaya Salsa: $3.00
- Pickled Salmon: $3.50
- Peanut Slaw: $1.95

### Main Courses

- Pasta & Shrimp: $8.95
- Poached Salmon: $9.95
- Pork Supper: $7.50
- Pasta Salad: $6.25
- Pastrami Sandwich: $7.00
- Peking Stir-Fry: $6.50
- Plantain Stew: $5.95
- Pepper Steak: $8.00

### Desserts

- Pineapple Slices: $3.00
- Pistachio Sundae: $3.50
- Peach Surprise: $2.95
- Pumpkin Sorbet: $2.50
- Peanut Squares: $2.75

### Drinks

- Pineapple Seltzer: $1.50
- Papaya Soda: $2.00
- Pear Slush: $3.00
- Peppermint Spritzer: $2.00
- Paris Special: $3.00

---

Chefs Pierre and Suzette welcome you
to their charming little restaurant.
Bon appétit!
Name: ________________________________

1. Look at the list of starters.
   How many cost more than $3? _______________________________

   What fraction of the starters cost $3 or less? ____________________

2. What percent of the starters cost $3 or less? ____________________

3. Look at the desserts.
   What fraction of these cost less than $3? ________________________

   What percent cost less than $3? ________________________________

4. What fraction of the starters and sides are not soups? ______________

5. What fraction of the desserts have nuts? _________________________

   What percent have nuts? ________________________________

6. What fraction of the items on the menu are main courses or drinks? ________________

   What percent are main courses or drinks? _____________________
Name: ________________________________

QUESTIONS - SET 1

1. Suzy orders a pastrami sandwich and a Paris special.
   How much does she pay? ____________________
   What fraction of the total price is the price of the sandwich? __________________

2. Pat orders a pork supper and pumpkin sorbet.
   How much does she pay? ____________________
   What fraction of the total price is the price of the sorbet? __________________

3. Peter orders a pepper steak with potato salad and a papaya soda.
   How much does he pay? ____________________
   What fraction of the total price is the price of the steak? __________________

4. Sara orders poached salmon with a side of peanut slaw.
   Paul orders the salmon with a pear salad.
   For which order is the salmon a greater fraction of the total price? Explain. __________________

5. Place an order of three items so that each item makes up a third of the total price.
   What can you say about the price of each item in your order? __________

6. Place an order of three items. Choose the items so that one of them makes up more than half the total price of the order.
   Explain your choice. ___________________________________________________
## Main Dishes
- Bacon Bumps $0.95
- Chicken Chirps $0.75
- Frisky Fritters $0.60
- Hamster Hash $0.65
- Hotdog Stew $0.55
- Liver Lumps $0.49
- Pet Platter $0.70
- Spicy Canary Wings $0.45
- Terrier Tacos $0.80

## Pup & Kitten Meals
- Egg Nibbles $0.35
- Guppy Gobbles $0.20
- Kitty Chews $0.30
- Mini Meat Mouthfuls $0.30
- Pupcorn $0.25
- Couch Bites $0.45
- Socks Sandwiches $0.20
- Tail Tastes $0.29
- Tiny Tuna Treats $0.35

## Sides and Salads
- Dirt (cup) $0.10
- Dirt (bowl) $0.25
- Flower Swallows $0.20
- Leash Chomps $0.15
- House Plant Salad $0.35
- Mousy Munchies $0.20
- Old Socks $0.29
- Woof-Woofs $0.20

## Treats
- Brownie Bones $0.49
- Frosty Feline Fudge $0.35
- Puppy Pie $0.59
- Tabby-oca Pudding $0.25

## Drinks
- Canine Crush $0.25
- Meow Milk $0.20
- Puddle Water $0.10

---

### What the Critics Are Saying:

- **“The best socks you’ll find anywhere!”**  
  — Duke (golden retriever)

- **“Purrrrrrr-fection!”**  
  — Mittens (Siamese cat)

- **“4 paws up!”**  
  — Fifi (poodle)

- **“Prices so low you can bring the whole litter!”**  
  — Pet Gourmet magazine
Name: ______________________________________________

1. Hal orders popcorn for each of his four puppies.
   How much does he pay? ________________________________________

2. Herman orders sides of leash chomps for King, Muffin, Flopsy, Rags, and Queenie.
   How much does he pay? ________________________________________

3. Gladys brings Whiskers and her six kittens in for supper. She starts each of them off with an order of flower swallows.
   How much does this cost? ________________________________________

4. Liam buys each of his seven Scotties a brownie bone. He also buys three orders of puppy pie for them to share.
   How much does he pay all together for these treats? ________________

5. Lia takes all five of her cats to dinner. She buys them all frisky fritters with canine crushes. She pays with a $5 bill.
   How much does change does she get? ______________________________

6. Larry treats his four dogs and four cats to lunch. He orders an old sock for each dog and tabby-oca pudding for each cat. Then he rewards the dogs’ good behavior with an order of terrier tacos for them to share. He pays for everything with $3.
   How much change does he get? ____________________________________
1. Ralph wants to order the same main dish for each of his ten dogs. Which dishes can he choose and keep the total price under $5? 

2. What costs less: 10 orders of puppy pie, or 10 orders of feline fudge plus 10 orders of tabby-oca pudding? Use number sense to figure it out. 

3. Kayla’s kitten, Trophy, has nine lives. So, she orders Trophy one of each of the nine kitten meals. Use mental math to find the total cost of the order. 

4. Jake orders 5 bowls of dirt and 5 leash chomps. Use mental math to find the total cost of this order. Explain your thinking. 

5. Explain how you could use mental math to find the cost of 5 orders of hotdog stew and 5 orders of spicy canary wings.
## Menu Math: Grades 4-5 © Martin Lee & Marcia Miller, Scholastic Teaching Resources

### Tantalizing Treats!
**Don't Wait. Come Before Mealtime!**

#### Plain Stuff
- Pound Cake: $3
- Chocolate Pudding: $2
- Custard: $2
- Jell-O: $2
- Butter Cookies: $1
- Ice Cream Cup or Cone: $2
- Rice Pudding: $2
- Regular Donut: $1

#### Healthy Stuff
- Fresh Fruit Cup: $4
- Raisins and Nuts: $3
- Cinnamon Apple Sauce: $2
- Poached Pear: $4
- Minty Orange Slices: $2

#### Goopy Stuff
- Hot Fudge Sundae: $4
- Candy Apple: $2
- Hot Caramel Crepe: $3
- Banana Split: $5
- Turtle Pie: $4
- S'mores: $3
- Peanut Brittle: $3
- Cream Puffs: $4

#### Toppings
- Hot Fudge: $1
- Whipped Cream: $1
- Sprinkles: $.50
- Caramel Sauce: $.75
- Chopped Nuts: $.50

---

**TO OUR VALUED CUSTOMERS:**
You are welcome to take your sweets with you. But we advise you to eat here. Some of our treats can melt, cool down, or flop if you wait too long. So order up, sit down, and enjoy!
1. Elise wants something plain for dessert. She doesn’t like rice pudding or custard. How many choices of plain desserts remain for her? ________________

2. Craig wants something healthy with one topping on it. He wants either whipped cream or sprinkles. How many dessert + topping pairs can he create? Explain. ________________

_______________________________________________________________________________

3. Jerry wants a goopy dessert with one topping. He wants either a banana split or a hot caramel crepe. He wants either whipped cream or chopped nuts. Among how many dessert + topping choices is Jerry deciding? ____________

4. Suppose that Jerry is also considering sprinkles as a topping. How many choices for desserts with one topping does that give him? ________________

5. Rose wants something plain with one topping on it. She doesn’t want a cake, a cookie, or a donut. She likes all the toppings. From how many dessert + topping choices will she make her decision? ________________

6. Cara wants a dessert with one topping. There are six desserts she wants. There are three toppings she likes. She would like any of the six desserts with any of the three toppings. How many dessert + topping combinations does she consider? ____________
Name: ______________________________________________

1. What is the range of the prices of the goopy treats? ______________________

2. What is the mean price of the healthy treats? ____________________________

3. What is the median price of the healthy treats? __________________________

4. What is the mode of the prices of the plain stuff? _________________________

5. What is the mean price of a goopy treat? ________________________________

6. What is the mean price of a goopy treat with whipped cream on it? 
   Explain how you got your answer. _______________________________________
   ____________________________________________________________________
   ____________________________________________________________________
   ____________________________________________________________________
   ____________________________________________________________________
   ____________________________________________________________________
   ____________________________________________________________________

QUESTIONS - SET 2

Menu Math: Grades 4-5 © Martin Lee & Marcia Miller, Scholastic Teaching Resources
When We Say “Catch of the Day,” We Mean It!

THE CATCH*

IN THE TANKS
Lobster .................. $8
Crab  ...................... $9
Trout  ...................... $6

ON ICE
Shrimp  .................. $7
Red Snapper .............. $5
Sole  ...................... $6
Chilean Sea Bass .......... $7
Grouper  .................. $5
Monkfish  .................. $6
Salmon  .................. $7
Tuna  ...................... $8
Sardines  .................. $4
Catfish  .................. $4
Mahi Mahi  ................ $6

THE OTHER STUFF

SIDES
French Fries ............... $3
Baked Potato ............... $2
Coleslaw  ................ $2
Potato Salad  ............... $2
Mixed Green Salad ......... $3
Onion Rings  ............... $3

DRINKS
Lemonade  ................ $2
Milk  ........................ $1
Soda  ........................ $2
Ice Water  .................. Free

DESSERTS
Pie  ....................... $3
Cake  ........................ $3
Brownie  .................. $2
Fruit Salad  ............... $3

*All prices are per pound.
1. You choose a 3-pound lobster. You order coleslaw and a soda to have with it. How much do you pay? ________________________________

2. You choose 2 pounds of salmon to share with your brother. With it, you order onion rings, ice water, and a brownie. How much does the meal cost? ________________________________

3. You order a 1.5-pound catfish with French fries and lemonade. How much do you pay? ________________________________

4. You order 4.5 pounds of shrimp and 3.25 pounds of mahi mahi. What do you pay? ________________________________

5. What is the cost of the following large order: a 5-pound lobster, 3.75 pounds of grouper, and 4.8 pounds of red snapper? ________________________________

6. Place an order of fish and other stuff that comes to exactly $50. Include at least 4 different items in your order. ________________________________
1. You order a 4-pound grouper. Tax is 5%.
   How much tax do you pay on your order? ______________________________

2. You choose a 2.5-pound sole, a mixed green salad, and a lemonade. Tax is 5%.
   What is the amount of tax you pay on your order? ________________

3. You select a 3.5-pound monk fish and French fries. Tax is 5%.
   How much tax do you pay with your order? What is the total cost of your order?
   ____________________________________________

4. You order a 2.25-pound lobster, an order of potato salad and a brownie. Tax is 8%.
   How much tax do you pay on your order? ____________________________
   What is the total cost of your order? ______________________________

5. You order pie, soda, onion rings, and 2.25 pounds of tuna. Tax is 6.5%.
   What is the total cost of your order? ______________________________

   How much of what you pay is the tax? ______________________________
   What percent of what you pay altogether is the tax? _________________
DEAR CUSTOMER:

You haven’t had bad food until you’ve tried ours. Our chefs have come up with tastes that are just plain terrible. But at least the portions are small!

**STARTERS**
- Spinach Puffs With Lime ...........$4.25
- Beet and Liver Salad ..............$3.95
- Dishwater Soup (plain) ..........$2.99
- Dishwater Soup (croutons) $3.59
- Fruit Cup With Hot Mustard $3.99
- Oysters in Cheese Sauce $4.99
- Aged Fish With Banana $3.75
- Avocado Ketchup Crepe $4.25

**SIDES**
- Raw Potato .......................$2.00
- Limp Lettuce ......................$2.00
- Stale Mint Biscuits ...............$1.00
- Overcooked Vegetables ..........$2.25
- Cold Cereal Salad .................$2.50
- Olive-Stuffed Hot Peppers $2.75
- Pickled Brussels Sprouts ........$3.00
- Rice and Jell-O Fritters ..........$2.00

**MAIN COURSES**
- Boiled Lamb & Lima Beans $7.99
- Steak in Chocolate Sauce $9.59
- Fried Fish Scales .................$7.50
- Roasted Clam Legs ...............$7.75
- Greyish Snapper .................$7.95
- Old Sole .................$8.00
- Soggy Vegetable Stew $6.59
- Frog Nose With Pineapple $7.50
- Pig’s Foot With Papaya $6.95

**DESSERTS AND BEVERAGES**
- Wax Bean Cake .................$4.00
- Artichoke Pie With Prunes $4.00
- Last Week’s Plum Pudding $3.00
- Celery Chip Ice Cream ...........$2.50
- Bruised Fresh Fruits .............$2.00
- Warm Carrot Juice ..........$2.00
- Iced Pickle Juice ...............$1.00
- Saltwater .......................$1.00

---

Our Take-Out Policy: We have none — who would want to take this stuff home?
QUESTIONS - SET 1

Simply Awful!

1. What is the price of the following meal:
   fruit cup, vegetable stew, pickle juice, and artichoke pie? _______________

2. Which starter and main course together cost $14.58? _______________

3. You pay $5.75 for a starter and a side.
   Which starter and side do you order? ________________________________

4. You order oysters in cheese sauce, a side of limp lettuce,
   a main course, and warm carrot juice to wash down your
   simply awful feast. Your order comes to $16.74.
   Which main course do you order? ________________________________

5. Your order comes to $14.50. You get the frog nose with
   pineapple, the cold cereal salad, a dessert and a beverage.
   Which dessert and beverage do you order? ________________________________

6. Pick a starter, main course, side, dessert, and beverage.
   What do you order? ________________________________

   ________________________________

   ________________________________

   ________________________________

   ________________________________

   ________________________________

   ________________________________

   ________________________________

You have a $20 bill. How much change do you get, or how much money do you need to borrow from a friend to pay the rest? _______________

   ________________________________
1. You order an avocado ketchup crepe and olive-stuffed hot peppers. Good choice! You pay your bill and leave the waiter a 20% tip.

How much is the tip? ________________________________

2. You order spinach puffs, fried fish scales, and overcooked vegetables. You leave a 15% tip.

How much do you pay all together? ________________________

3. You invite four friends for dessert at Simply Awful. You treat them all to last week’s plum pudding. You yourself order the wax bean cake. Delicious! You leave a 20% tip. What is the total cost? _______________________

4. You order steak in chocolate sauce with limp lettuce, stale mint biscuits, and an order of saltwater. Tax is 5%. You leave a $2 tip. To the nearest penny, how much is the tax and how much do you pay in all for the meal? ____________________________

5. Order the worst meal you can put together from this menu. Pick a starter, main course, side, dessert, and beverage. Leave the waiter a 15% tip.

What is the total cost, to the nearest cent? ____________________________

6. Order the best meal you can put together from the items on this menu. Pick a starter, main course, side, dessert, and beverage. ________________ ________________ ________________ ________________

Pay 5% in tax. Leave the waiter a 20% tip.

What do you pay all together, to the nearest cent? ____________________________
**Smoothies and Fruit Juices**

### Juices—small/large

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<thead>
<tr>
<th>Juice</th>
<th>Small</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple</td>
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<td>$3.00</td>
</tr>
<tr>
<td>Blueberry</td>
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<tr>
<td>Grape</td>
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<td>$3.50</td>
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<tr>
<td>Honeydew</td>
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<tr>
<td>Lemon</td>
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<tr>
<td>Mango</td>
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</tr>
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<td>Orange</td>
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<td>$3.25</td>
</tr>
<tr>
<td>Papaya</td>
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</tr>
<tr>
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</table>

### Mix 'Em (large size only)

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<th>Price</th>
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</thead>
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<tr>
<td>Any Two-Juice Combo</td>
<td>$3.75</td>
</tr>
<tr>
<td>Any Three-Juice Combo</td>
<td>$5.50</td>
</tr>
</tbody>
</table>

### Smoothies

<table>
<thead>
<tr>
<th>Combo</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Two-Juice Combos</td>
<td>$3.29</td>
</tr>
<tr>
<td>All Three-Juice Combos</td>
<td>$4.79</td>
</tr>
</tbody>
</table>

**ORDER BY NUMBER:**

1. Pear-Blueberry
2. Raspberry-Apple
3. Lemon-Grapefruit
4. Orange-Pineapple
5. Strawberry-Grapefruit
6. Mango-Grape-Papaya
7. Watermelon-Mango-Grape
8. Honeydew-Pineapple-Mango
9. Blueberry-Honeydew-Papaya
10. Raspberry-Grapefruit-Papaya

Our healthy delicious smoothies are made with fresh fruits, ice, and frozen yogurt.
Name: ______________________________________________

1. Find the difference in price between a small orange juice and a large one. ________________________________

2. How much less does a two-juice smoothie cost than a three-juice smoothie? _______________________________

3. How much more do you pay for a two-juice combo smoothie of your choice than you do for a numbered two-juice smoothie? ________________________________
   Why do you think you pay more? ________________________________

4. Ray orders a large pineapple juice. Shamika orders a small grape juice. How much more does Ray pay? ________________________________

5. Kenji orders a #9 smoothie. Eddie orders a #5 smoothie. Who pays more? ________________________________
   How much more? ________________________________

6. Phil orders a three-juice combo. Serena orders a #8 smoothie. Rosa orders a choose-your-own two-juice smoothie combo. Rosa’s mom pays for the drinks. How much does it cost her? ________________________________
1. How many different kinds of fruit juices are on the menu?

2. What fraction of the small juices sell for less than $2?

3. What fraction of the ten smoothies are three-juice combos?
Express your answer in simplest form.

4. What is the difference in price between a large raspberry juice and a small raspberry juice?
What fraction of the price of a small juice is that difference?
Express your answer in simplest form.

5. Ian orders a small watermelon juice for himself and a large watermelon juice for Ruby.
What fraction of the total price is the cost of Ian’s juice?
Express your answer in simplest form.

6. Take an order for juices and smoothies from a small group of classmates. Then describe that order in several ways; use sorting, fractions, and costs. Use the other side of your paper.
# High Price Harry's

## Firsts and Sides
- Corn on the Cob: $9.00
- Green Salad: $12.50
- Clam Chowder: $14.00
- Baked Potato: $8.00
- Mixed Vegetables: $9.50
- Tomato Salad: $12.00
- Rice and Beans: $15.00
- Shrimp Cocktail: $40.00
- Tomato Soup: $13.50
- Rolls (You thought they'd be free?): $4.00

## Main Courses
- Lamb Chops: $25.00
- Barbecued Ribs: $19.00
- Turkey Dog: $17.00
- Hamburger: $15.00
- Spaghetti and Meatballs: $18.50
- Roast Chicken: $21.50
- Chili: $18.00
- Liver and Onions: $22.50
- Veal Parmesan: $25.00
- Vegetable Stew: $18.00
- Beef or Bean Burrito: $16.50

## Desserts
- Chocolate Fudge Cake: $9.75
- Cheesecake: $11.25
- Ice Cream: $7.50
- Apple or Blueberry Pie: $8.95
  (with ice cream, add $5.00)
- Rice Pudding: $6.95

## Drinks
- Grape or Orange Juice: $6.00
- Milk: $5.00
- Chocolate Milk: $7.00
- Soda: $6.50
- Apple Cider: $7.50
- Ice Water: $2.00

---

**To Our Customers:**
Don't forget to give big tips to our excellent waiters. They deserve them, and we don't pay them very much.
1. What do you pay for a green salad, a turkey dog, and an apple cider? ______________________________

2. Tax is 8%. How much tax do you pay for the order in question 1? ________________________________
   What is your new total, including the tax? ________________________________

3. You order tomato salad, chili, ice cream, and soda. Tax is 6%.
   How much tax do you pay on this order? ________________________________

4. You order the vegetable stew. You order a drink that costs 1/3 as much as that stew.
   How much do you pay for your drink? ________________________________
   What is the total cost of your meal? ________________________________

5. Tax is 7.5%. What is the tax for your order in question 4? ________________________________
   What is the total cost of your meal, including the tax? ________________________________

6. Place an order. Include a first or side, a main course, a drink, and a dessert. ________________________________
   Include tax of 5%.
   How much do you pay all together? ________________________________
Name: ______________________________________________

1. Which side dish costs $\frac{3}{5}$ of the price of lamb chops? __________________________________________________________

2. Which dessert costs $\frac{1}{3}$ of the price of liver and onions? _____________________________________________________

3. You order veal parmesan. You order a first that costs half as much as the veal. You pay 10% tax on your order. What is the total cost of your order? __________________________________________

4. Tax is 10%. You pay $4$ in tax. You order a main course and a first. What do you order? ________________________________

5. Tax is 5%. You pay $1.50$ in tax. You order a main course, a side, and a grape juice. What main course and side do you order? ________________________________

6. Place an order. Include a first or side, a main course, a drink, and a dessert. ________________________________

Include tax of 8%. Then leave a tip of 20%. How much do you pay all together? __________________________________________
We Do the Basics. The Rest Is Up to You!

Thick Crust (Chicago Style)
Small Pie .................. $9.00
Regular Pie ............... $12.00
Large Pie ................... $15.00

Thin Crust (New York Style)
Small Pie .................. $8.00
Regular Pie ............... $11.00
Large Pie ................... $14.00

Toppings
onions ● garlic ● mushrooms ● peppers ● artichokes ● broccoli
anchovies ● sausage ● pepperoni ● meatballs
chicken ● lobster ● shrimp ● ham

Order as many toppings as you wish!
All toppings $1.50 each.

BUT
extra cheese $2.00
lobster or shrimp $2.50

All pizzas come with cheese, tomato sauce, and lots of napkins.
1. What is the price of a small Chicago-style pie with onions and meatballs on top? ___________________________

2. How much is a regular thin-crust pie with chicken and extra cheese? _________________________________

3. Which costs more: a large thick-crust pie with garlic and mushrooms, or a small thin-crust pie with sausage, shrimp, and extra cheese? ______________________________
   HOW MUCH MORE?
   __________________________________________________________________________________________

4. Sharda orders a thick-crust pie with broccoli and anchovies. The price comes to $15. What size pie does she order? ________________

5. Gus orders a pie with mushrooms, peppers, and ham. The price comes to $15.50. What size pie does he order? ____________________________
   WHAT KIND OF CRUST DOES IT HAVE?
   __________________________________________________________________________________________

6. Order the pizza of your dreams. Add as many toppings as you wish. What’s your order?
   __________________________________________________________________________________________
   SPLIT THE PIZZA (AND COST) WITH A FRIEND.
   HOW MUCH DO EACH OF YOU PAY? ____________________________________________________________
Name: ______________________________________________

1. You want a thick-crust pie. You’ll get either onions or artichokes on it.
   How many pie-and-topping choices do you have? __________________

2. You are ordering pizza. You are deciding between regular thin and regular thick crust. You want one topping—either chicken or sausage.
   Among how many choices must you decide? __________________

3. You want an Italian-style pie, but you aren’t sure which size to get. You want one topping: shrimp or ham or anchovies. How many choices do you have? ______

4. You can’t make up your mind. You want either a regular thin crust or a large thin crust. You want either onions, shrimp, chicken, or peppers.
   How many pie-and-topping choices are you considering? ______________

5. How many choices are there on the menu for any size pizza with either kind of crust and one topping, including extra cheese? ________________________________

6. Create a question using the data on the menu. Challenge classmates to solve it!
   ____________________________________________________________________
   ____________________________________________________________________

QUESTIONS - SET 1

Menu Math: Grades 4-5 © Martin Lee & Marcia Miller, Scholastic Teaching Resources
Choose a Tortilla and Fill It Up!

**THE WRAPS**
- Corn
- Flour
- Whole Wheat
- Jalapeño
- Black Bean
- Tomato Garlic

Wraps: $3.00 each
Deep-Fried Wraps, add $1.00
Enchilada Style, add $2.00

**FILLINGS**
- Beans
- Cheese
- Beef
- Onions
- Peppers
- Rice
- Pork
- Chicken
- Shrimp

Fillings: $1.50 each

**TOPPINGS**
- Sour Cream
- Guacamole
- Cheese
- Lettuce & Tomato
- Salsa

Toppings: $1.00
Order as many as you wish!
Questions - Set 1

1. How many different fillings are there? ____________________________
   How many different toppings? ________________________________

2. How many choices are there for wraps? __________________________
   (Hint: Wraps come in three different styles.)

3. Jason wants to order a deep-fried wrap filled with shrimp and topped with salsa.
   How many wrap-filling-topping choices does he have? _________________

4. The Whole Enchilada has run out of one of the wraps it usually offers.
   What is the probability that they are out of flour wraps? ______________

5. The Whole Enchilada has run out of one kind of topping.
   What is the probability that it has run out of sour cream? ______________
   What is the probability that it has not run out of sour cream? ____________

6. Peter orders a wrap with one filling.
   What is the probability that he orders a black bean wrap filled with duck?
1. How many different choices are there for deep-fried wraps filled with either cheese or beans? ____________________________

2. Dawn is ordering a wrap and one filling.
What is the probability that she chooses either a corn, flour, whole wheat, jalapeno, black bean, or tomato garlic wrap? ____________________________

3. Nora chooses a wrap at random.
What is the probability that she chooses either whole wheat or tomato garlic? ____________________________

4. How many choices are there for any kind of wrap (regular, deep-fried, or enchilada style) and any one filling? ____________________________

5. The Whole Enchilada is featuring its enchilada-style wraps. Each day for six days, it offers a different enchilada-style wrap for free. You show up there one day that week.
What is the probability that you’ll get a corn wrap on that day? __________

6. Donald wants a deep-fried wrap with one filling (either beef, pork, or chicken). He can’t decide which wrap or which of these fillings to order. So he tells the server to bring her favorite deep-fried wrap and her favorite of the three fillings.
What is the probability Donald is served a black bean wrap filled with pork? ____________________________
More Restaurant Reproducibles
ORDER FORM

Restaurant _______________________

Waiter ________________________ Number of Customers _____________

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<tr>
<th>QUANTITY</th>
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TOTAL
Menu

Name of Restaurant

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Main Dishes

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Drinks


Desserts


Restaurant Review

Name of Restaurant ____________________________________________

Location ____________________________________________________

Type of Food _________________________________________________

Date I Ate There ______________________________________________

My Dining Companions _________________________________________

Cost of My Meal ______________________________________________

1. What I Ordered _____________________________________________

________________________________________________________________

2. Quality of Food _____________________________________________

________________________________________________________________

3. Atmosphere of Restaurant ___________________________________

________________________________________________________________

4. Other Comments ____________________________________________

________________________________________________________________

5. Recommendations __________________________________________

________________________________________________________________

Menu Math: Grades 4-5 © Martin Lee & Marcia Miller, Scholastic Teaching Resources
Tips on Tipping

It is customary in most restaurants to leave a tip that represents about 15% of the total bill (not counting tax). The tip exists as a way to reward the quality of service you receive. There are many ways to figure out a 15% tip.

One way is to use mental math. Here's how:
1. Round the total price of the meal (without tax) to the nearest dollar.
2. Find 10% of this rounded total.
3. Now find half of that amount (= 5%)
4. Add the two quantities (10% + 5%) for a 15% tip.

Suppose you eat at Simply Awful. Your terrible meal comes to $17.95. The food may have been bad, but the waiter was helpful and friendly. So here's how to figure a 15% tip:

1. Round $17.95 to the nearest dollar . . . $17.95 ——> $18.00.
2. Find 10% of $18.00. . . . . . . . . . . . . . $18.00 x 10% = $1.80
3. Now find half of $1.80. . . . . . . . . . . . . . $1.80 ÷ 2 = $.90
4. Add $1.80 + $.90. . . . . . . . . . . . . . . . $1.80 + $.90 = $2.70

Using this method, a 15% tip for your meal at Simply Awful is $2.70. BUT—Here's where you, as the customer, have a choice to make.

- If your service was especially good, you might increase the tip. In this case, you might leave $3.00 instead of $2.70.
- If the service was a problem, you might decrease the tip. In this case, you might leave $2.00.
**Answers**

**America Eats!**

**Set 1**
1. jambalaya, crab cakes; New York cheesecake, Georgia peach pie
2. $9.95
3. $16.60
4. Yes; use rounding to estimate.
5. Yes; all but the cheesecake.
6. No; the dollar amounts alone add up to $12.

**Set 2**
1. $25.59
2. $12.10
3. orange juice
4. cheesecake
5. peach pie
6. orange juice and jambalaya

**Best Foot Forward**

**Set 1**
1. Salami or pepperoni
2. pickle
3. $3
4. $.90
5. $1.90
6. $18.80

**Set 2**
1. $.25
2. $1.50
3. 10 ft.
4. 2 1/2 ft.
5. $7.20
6. licorice laces
7. Answers will vary.

**Home on the Range**

**Set 1**
1. Add to find total.
2. Subtraction
3. Add to find total; subtract to find change
4. Multiply to find the total for each order; subtract to find the difference.
5. Add the prices of the items; divide by 3.
6. Answers will vary.

**Tastes of Asia**

**Set 1**
1. po pia; bun xao, xuong nuong
2. canh chua, cha gio
3. tom yum gung
4. nua nam mun hoy
5. tom yum gung and po pia
6. cha tom and raucai nuong

**Set 2**
1. Yes
2. No
3. nua nam mun hoy and pla jean
4. Have students explain their answers.
5. Have students explain their answers.

**Lunch and Dinner**

**Set 1**
1. dinner; larger portions
2. $1.50; shrimp cocktail
3. chef’s salad, chips and salsa, lasagna
4. 4/6 or 2/3
5. 3/4

**Set 2**
1. dinner
2. lunch
3. lunch
4. fruit pie
5. dinner

**Space Foods**

**Set 1**
1. $600
2. No
3. $250
4. $5,400
5. Friend’s; $125 more
6. Have students share their orders and explain their answers.

**Set 2**
1. $100
2. $250
3. $100; $400
4. $125
5. 4/5 off; 1/5 < 2/3
6. Have students explain their reasoning.

**P.S. I Love You**

**Set 1**
1. 2; 6/8 or 3/4
2. 75%
3. 3/5; 60%
4. 6/8 or 3/4
5. 2/5; 40%
6. 1/2; 50%

**Set 2**
1. $10; 7/10
2. $10; 1/4
3. $12; 2/3 or 8/12
4. Sara’s; $1.95 < $3.25
5. Each is the same price.
6. Have students explain their reasoning.
### The Hungry Hound
**Set 1**
1. $1
2. $.75
3. $1.40
4. $5.20
5. $.75  6. $.04

**Set 2**
1. liver lumps or canary wings
2. puppy pie; $.59 < $.60
3. $2.69; Have students explain their mental math strategies.
4. $2
5. One way: add $.55 + $.45, then multiply by 5.

### Simply Awful!
**Set 1**
1. $15.58
2. oysters and steak
3. aged fish and either the potato, the lettuce, or the rice and Jell-O fritters
4. roasted clam legs
5. celery chip ice cream and carrot juice
6. Have students give their orders and explain their answers.

**Set 2**
1. $1.40
2. $16.10
3. $19.20
4. $.68, $16.27
5. $27.69
6. Have students give their answers.

### The Sweet Tooth
**Set 1**
1. 6
2. 10; 5 desserts, 2 topping choices for each
3. 4
4. 6
5. 25
6. 18

**Set 2**
1. $3
2. $3
3. $3
4. $2
5. $4
6. $5; $4 + $1 = $5.

### The Fishing Hole
**Set 1**
1. $28
2. $19
3. $11
4. $51
5. $82.75
6. Have students explain their orders.

**Set 2**
1. $1.20; $25.20
2. $1.76; $23.76
3. $27.69
4. $1.20; 10%

### Simply Awful!
**Set 1**
1. $15.58
2. oysters and steak
3. aged fish and either the potato, the lettuce, or the rice and Jell-O fritters
4. roasted clam legs
5. celery chip ice cream and carrot juice
6. Have students give their orders and explain their answers.

**Set 2**
1. $1.40
2. $16.10
3. $19.20
4. $.68, $16.27
5. $27.69
6. Have students give their answers.

### Juice Bar
**Set 1**
1. $1.25
2. $1.50
3. $1.40; One reason: The numbered drinks are pre-made in bulk.
4. $2.25
5. Kenji; $1.50
6. $13.98

**Set 2**
1. 14
2. 6/14 or 3/7
3. 1/2
4. $1.50; 3/5
5. 3/8
6. Have students explain their descriptions.

### Pizza People
**Set 1**
1. $12
2. $14.50
3. large pie; $4.50 more
4. regular
5. regular, thin crust
6. Have students explain their answers.

**Set 2**
1. 1.6
2. 4
3. 9
4. 8
5. 90
6. Have students provide answers to their questions.

### The Whole Enchilada
**Set 1**
1. 9; 5
2. 18
3. 6
4. 1/6
5. 1/5; 4/5
6. 1/18

**Set 2**
1. 12
2. 1/6
3. 1/3
4. 162
5. 1/6
6. 1/18