

Lesson: Enrichment for Adding, Subtracting, Multiplying and Dividing Decimals

Sixth Grade Objective: 1.04 Develop fluency in addition, subtraction, multiplication and division of nonnegative rational numbers

- a) Analyze computational strategies
- b) Describe the effect of operations to size
- c) Estimate the results to computations
- d) Judge the reasonableness of solutions

Review.

Evaluate. Round your answers to the nearest tenth.

1. 0.56×3.5 2. $6.5 \overline{)35}$ 3. $78.3 + 0.8 =$ 4. $12 - 3.5 =$

5. Sharon and Tom went on vacation. They spent \$125.00 in gas, \$150.00 in food and \$300.00 for lodging. Sharon stopped at the gift store and bought two t-shirts at \$15.50 a piece, a coffee mug at \$9.99 and five souvenir pens for \$.99 each. About how much did they spend on their trip?

Check your answers

Evaluate. Round your answers to the nearest tenth.

1. $0.56 \times 3.5 = 1.960$ 2. $6.5 \overline{)350.0} = 53$

-325	↓
250	
-195	
55	

3. $78.3 + 0.8 = 79.1$ 4. $12.00 - 3.50 = 8.50$

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About tells you to estimate!

Sharon and Tom spent about \$650.00 on their trip.

TOM'S DINER!

MENU

ACTIVITY 1:

Appetizers

Cheese Sticks \$4.99
Soup \$2.50
Chips and Salsa \$1.5
Chips and Cheese Dip \$2.5
Cheese Fries \$4.99

Desserts

Add a scoop of ice cream for \$.95.
Chocolate cake \$1.50
Apple pie \$1.95
Mini apple pie 2 @ \$1.00
Lemon pie \$1.95

Entrees

All entrees include fries. Add a salad for \$1.99.

Hamburger \$6.99

Cheeseburger \$7.99

Fajitas:

Chicken \$10.99

Steak \$11.25

Shrimp \$12.00

Fajitas combo \$15.25

Answer the questions using the menu.

1. Shirley and Frank go to lunch. They order the cheese sticks for an appetizer and two cheeseburgers. They split a salad and do not order dessert. What was their total?
2. Estimate the cost of an order of soup, steak fajitas, Hamburger with a salad and a piece of chocolate cake.
3. What would be the cost of half an order of cheese fries with 7% sales tax?
4. Stephen, Michelle and Debbie have dinner at the diner. They only have \$30.00. If they get chips and salsa, three hamburgers and three mini apple pies. Do they have enough money for the 7% sales tax and to leave a \$5 tip? Why or Why not.
5. The Hungry family places a take out order. They want to know about how much all of the appetizers and entrees (no salads) would cost on the entire menu. Once they see the estimate, they decide to place the order of all of the appetizers and entrees. They now need the exact cost to write a check. Estimate and find the actual cost. Compare your answers. Was the Hungry family surprised at the cost or was the estimate close to the actual?

ACTIVITY 2:**Divide. Round to the nearest tenths.**

1. $9.2 \overline{)8.9}$

2. $7 \div 3.5 =$

3. $2.5 \div 45$

CHECK YOUR ANSWERS!**ACTIVITY 1:**

1. \$22.96

2. \$25.00

3. In this problem you must divide \$4.99 in half. It equals \$2.495, which rounds to \$2.50. To find the sales tax multiply $\$2.5 \times 0.07 = 0.175 = 0.18$ (The sales tax is \$0.18)

Add.

$\$2.50$

$+0.18$

$\$2.68$

4. Their total is \$23.97. To calculate the tax, multiply the total by 7% or 0.07, which equals 1.6779. This rounds to \$1.68 for the tax. Add the tax to \$23.97 to get \$25.65. Add the \$5.00 tip to get \$30.65. No, they do not have enough. They are \$0.65 short.
5. About \$82
Actual = \$80.95
No the Hungry family was not surprised because the estimate was very close.

ACTIVITY 2:**Divide. Round to the nearest tenths.**

1. $92 \overline{)89.0} = .10$

2. $35 \overline{)70.0} = 2$

3. $45 \overline{)2.50} = .06$