

Solve each problem below using your knowledge of decimals.

1. Estimate each sum. **Estimates will vary. Exact answers are shown below.**

- a)  $\$7.15 + \$6.39$   **$\$13.54$**
- b)  $44.158 + 19.123 + 6.087$   **$69.368$**
- c)  $0.24 + 0.009 + 0.398$   **$0.647$**
- d)  $\$5.89 + 0.45 + \$2.11 + \$1.79$   **$\$10.24$**

2. Add each set of decimals.

- a)  $5.79 + 3.085$   **$8.875$**
- b)  $24.07 + 5.321 + 203.2$   **$\$13.54$**
- c)  $\$199.49 + 43.79 + 50.00$   **$232.591$**
- d)  $89.85 + 0.02 + 2.71984$   **$92.58984$**

3. Sophia went shopping for clothes and estimated that her total would be \$110.00. The actual total was \$114.38. Did she overestimate or underestimate? Explain your answer.

**Sophia underestimated since her estimate of \$110.00 was less than the actual cost of \$114.38.**

4. Expenses for the Chen's family vacation were \$984.50 for hotels, \$387.95 for meals, \$184 for transportation, and \$84.72 for souvenirs. Estimate the total cost.

**Rounding to the nearest ten, we get an estimate of  $\$980 + \$390 + \$180 + \$80 = \$1,630$ .**

5. Lori estimated that her monthly food expenses would be \$800.00. The actual cost was \$786.45. Did she overestimate or underestimate? Explain your answer.

**Lori overestimated since her estimate of 800.00 was more than the actual cost of \$786.45.**

6. A marble rolled 3.8659 cm and then rolled 16.17 cm. How far did it roll altogether? **20.0359 cm**

7. Carol measured her lunch in grams for three days: She measured 98.945 grams on Monday, 27.9265 grams on Tuesday and 411.87 grams on Wednesday. What is the total weight of these lunches in grams?

**538.7415 grams**