

Pasadena Purchase Power: Mastering Sales Tax

Materials Needed

- Pencil or Pen
- Notebook or Paper
- Calculator (optional, but encouraged)
- "Pasadena Shopping Scenarios" worksheet (3-5 items with different prices)
- Highlighter or colored pen

Learning Objectives

By the end of this lesson, you will be able to:

1. Explain the purpose of sales tax and identify the current Pasadena sales tax rate (9.5%).
2. Convert a percentage tax rate into its decimal equivalent.
3. Accurately calculate the amount of sales tax on a given purchase price.
4. Determine the final total cost of an item purchased in Pasadena, CA.

Part 1: The Extra Cents (10 Minutes)

The Hook

Imagine you see a cool new video game accessory priced at \$20.00 in a store on Colorado Boulevard. You head to the register with exactly \$20.00, but the cashier says you owe more! Why? Where do those extra few dollars and cents go? That extra cost is called Sales Tax.

Real-World Relevance

Sales tax is an important part of personal finance. If you don't calculate tax before you shop, you might not have enough money to buy what you want! That extra money supports local city services like roads, libraries, and parks right here in Pasadena.

Success Criteria Check

You will know you are successful when you can correctly fill out a receipt showing the original price, the tax amount, and the final total.

Part 2: The Pasadena Percentage (35 Minutes)

I Do: Modeling the Calculation (10 Minutes)

The Key Number: 9.5%

In Pasadena (and throughout Los Angeles County), the current sales tax rate is **9.5%**. We cannot multiply by a percentage, so we must first convert it to a decimal. To do this, we move the decimal point

two places to the left.

- 9.5% becomes **0.095**. (This is the magic number we will use!)

Example Calculation Walkthrough

Let's calculate the tax on a \$40.00 comic book:

1. **Step 1: Identify the Price and Tax Rate.**

$$\text{Price (P)} = \$40.00 \mid \text{Tax Rate (R)} = 0.095$$

2. **Step 2: Calculate the Tax Amount.** ($P \times R = \text{Tax}$)

$$\$40.00 \times 0.095 = \$3.80$$

(\$3.80 is the sales tax amount.)

3. **Step 3: Calculate the Total Cost.** ($\text{Price} + \text{Tax} = \text{Total}$)

$$\$40.00 + \$3.80 = \$43.80$$

The comic book actually costs \$43.80.

We Do: Guided Practice (15 Minutes)

Let's practice two scenarios together. Remember the steps: Convert the percentage, multiply, and then add!

Scenario A: The Pasadena Rose T-Shirt

- **Price:** \$25.00
- **Tax Rate (Decimal):** 0.095
- **Calculate Tax:** $\$25.00 \times 0.095 = ?$ (Answer: \$2.38)
- **Calculate Total:** $\$25.00 + \$2.38 = ?$ (Answer: \$27.38)

Scenario B: Supplies for the Jet Propulsion Lab (JPL) Gift Shop

This time, the price is not a whole number. Remember to round your tax calculation to the nearest cent (two decimal places).

- **Price:** \$17.50
- **Tax Rate (Decimal):** 0.095
- **Calculate Tax:** $\$17.50 \times 0.095 = 1.6625$ (We round this to \$1.66)
- **Calculate Total:** $\$17.50 + \$1.66 = ?$ (Answer: \$19.16)

You Do: Independent Practice (10 Minutes)

Use your "Pasadena Shopping Scenarios" worksheet. Complete the following three purchases independently. Show all three steps (Multiplication, Rounding, Addition) for each item.

Shopping Scenarios (Worksheet Activity)

1. **Item 1:** New art supplies: \$12.00
2. **Item 2:** Gourmet pizza slice (taxable): \$8.50
3. **Item 3:** A new book about California history: \$34.99

Formative Assessment Check: Review the student's work on Item 2 (\$8.50). If they calculated \$0.81 tax and \$9.31 total, they understand the process and rounding.

Part 3: Final Checkout (15 Minutes)

Recap and Reflection

Let's revisit our key steps. What is the most important number we use for calculating tax in Pasadena? (Answer: 0.095).

Why do we calculate tax separately instead of just rounding the whole price up? (Because the tax money goes to the government, not the store).

Summative Assessment: The Budget Challenge

Fasola has exactly \$55.00 cash to spend at the Pasadena Playhouse on a souvenir. They have found a limited-edition poster priced at \$52.99.

Challenge: Can Fasola afford the poster? Calculate the final cost and determine if they have enough cash or how much money they have left over/are short.

Answer Key for Assessment:

- Tax Amount: $\$52.99 \times 0.095 = \5.03405 (Rounds to \$5.03)
- Total Cost: $\$52.99 + \$5.03 = \$58.02$
- Conclusion: No, Fasola is \$3.02 short.

Takeaways

You now have the power to know exactly how much money you need whenever you shop for taxable goods in Pasadena!

Adaptability & Differentiation

Scaffolding (Support)

- **Use a Chart:** Provide a laminated "Tax Conversion Chart" showing the steps and the decimal (0.095) clearly highlighted, reducing cognitive load.
- **Focus on Calculation:** If multiplication is difficult, allow the use of a calculator for the $P \times R$ step, focusing the student purely on the setup and the final addition/rounding.

Extension (Challenge)

- **Working Backward:** Challenge the learner to work backward. "If the total bill was \$65.70, and you know the tax rate is 9.5%, what was the original price of the item?" (Requires dividing the

total by 1.095).

- **Comparison Shopping:** Research and calculate the final cost of the \$52.99 poster if it were purchased in Glendale (also 9.5%), versus San Francisco (8.625%), versus Delaware (0%).
- **Exemptions:** Research which types of goods are exempt from sales tax in California (e.g., most groceries).