

Sales Tax — Advanced Practice

Real-world challenges • 6% sales tax • Round answers to the nearest cent

Name: _____

Date: _____

Methods You'll Use

Finding the Total Cost (one step):

$$\text{Total} = \text{Price} \times 1.06$$

The 1 keeps the original price; the 0.06 adds the 6% tax — all in one multiplication.

Multi-Item Shopping: Add First, Then Multiply

Step 1: Add all item prices together → Step 2: Multiply the combined price $\times 1.06$.

Tax is calculated on the full combined price, then added in one step.

Checking Your Budget:

Compare the total (with tax) to your budget. If the total is **more** than your budget, you cannot afford it. Subtract to find how much you are over or how much you have left.

Practice Problems

Each problem has its own budget • Formula: $\text{Price} \times 1.06 = \text{Total}$ • Round to the nearest cent

Problem 1: Sneakers

Budget: \$40.00

Price before tax: \$34.99 Tax Rate: 6%

Total cost ($\text{Price} \times 1.06$):

$\$34.99 \times 1.06 = \$$ _____

Can you afford it?

YES **NO** (circle one)

Money left over / amount over budget:

\$ _____

Problem 2: Two Items Together

Budget: \$30.00

Item 1: Backpack — \$18.99

Item 2: Water Bottle — \$8.50

Step 1 — Add the prices:

$\$18.99 + \$8.50 = \$$ _____

Step 2 — Total with tax (combined price $\times 1.06$):

\$ _____ $\times 1.06 = \$$ _____

Can you afford both?

YES **NO** (circle one)

Money left over / amount over budget:

\$ _____

Problem 3: Two Items Together

Budget: \$60.00

Item 1: Headphones — \$44.99

Item 2: Phone Case — \$12.99

Step 1 — Add the prices:

\$44.99 + \$12.99 = \$ _____

Step 2 — Total with tax (combined price $\times$ 1.06):

\$ _____ $\times$ 1.06 = \$ _____

Can you afford both?

YES **NO** *(circle one)*

Money left over / amount over budget:

\$ _____

Practice Problems *(continued)*

Each problem has its own budget • Formula: $\text{Price} \times 1.06 = \text{Total}$ • Round to the nearest cent

Problem 4: Gaming Controller

Budget: \$45.00

Price before tax: \$39.99 Tax Rate: 6%

Total cost ($\text{Price} \times 1.06$):

$\$39.99 \times 1.06 = \$$ _____

Can you afford it?

YES **NO** *(circle one)*

Money left over / amount over budget:

\$ _____

Problem 5: Two Items Together

Budget: \$20.00

Item 1: Book — \$8.99

Item 2: Notebook — \$4.50

Step 1 — Add the prices:

$\$8.99 + \$4.50 = \$$ _____

Step 2 — Total with tax (combined price $\times 1.06$):

\$ _____ $\times 1.06 = \$$ _____

Can you afford both?

YES **NO** *(circle one)*

Money left over / amount over budget:

\$ _____

Problem 6: Two Items Together**Budget: \$75.00****Item 1:** Running Shoes — \$59.99**Item 2:** Water Bottle — \$12.50

Step 1 — Add the prices:

$$\$59.99 + \$12.50 = \$ \underline{\hspace{2cm}}$$

Step 2 — Total with tax (combined price $\times$ 1.06):

$$\$ \underline{\hspace{2cm}} \times 1.06 = \$ \underline{\hspace{2cm}}$$

Can you afford both?

YES **NO** *(circle one)*

Money left over / amount over budget:

$$\$ \underline{\hspace{2cm}}$$

Challenge Problems

Stretch your thinking. Show all your work.

Challenge 1: Party Budget Planning (Budget: \$100.00)

You are planning a birthday party and need three things. Find the total with tax for **each item** (price $\times$ 1.06), then add them all up.

Item	Price	Price $\times$ 1.06 = Total
Decorations	\$18.99	\$ _____
Snacks	\$24.00	\$ _____
Gift	\$42.00	\$ _____

Grand Total: \$ _____

Within \$100.00 budget? **YES** **NO** (circle one)

Money left over / over budget: \$ _____

Challenge 2: Which Store Has the Best Price?

You want to buy headphones. Three stores sell the same pair at different prices. Calculate the **total cost with tax** (price $\times$ 1.06) for each store, then find the cheapest.

Store	Price Before Tax	Price $\times$ 1.06 = Total
Store A	\$45.00	\$ _____
Store B	\$42.50	\$ _____
Store C	\$43.99	\$ _____

Which store has the lowest total cost? **STORE A** **STORE B** **STORE C** (circle one)

How much do you save compared to the most expensive store? \$

Reflection & Answer Key

Write 1–2 sentences for each question · Answer Key for teachers only

Reflection Questions

1. Why does every item at the store cost more than the price tag says?

2. In Problem 6, the total with tax went over budget. What are two things you could do to stay within your \$75.00 budget?

3. In Challenge 2, all three stores sell the same headphones. Why is it important to calculate the total with tax before deciding where to buy?

Answer Key

#	Item / Scenario	Calculation	Total	Budget	Afford?	Left / Over
1	Sneakers	$\$34.99 \times 1.06$	\$37.09	\$40	YES	\$2.91 left
2	Backpack + Water Bottle	$\$27.49 \times 1.06$	\$29.14	\$30	YES	\$0.86 left
3	Headphones + Phone Case	$\$57.98 \times 1.06$	\$61.46	\$60	NO	\$1.46 over
4	Gaming Controller	$\$39.99 \times 1.06$	\$42.39	\$45	YES	\$2.61 left
5	Book + Notebook (\$13.49)	$\$13.49 \times 1.06$	\$14.30	\$20	YES	\$5.70 left
6	Running Shoes + Water Bottle (\$72.49)	$\$72.49 \times 1.06$	\$76.84	\$75	NO	\$1.84 over

Challenge Answers

Challenge 1: Decorations $\$18.99 \times 1.06 = \20.13 | Snacks $\$24.00 \times 1.06 = \25.44 | Gift $\$42.00 \times 1.06 = \44.52

Grand Total: $\$20.13 + \$25.44 + \$44.52 = \$90.09 \rightarrow$ YES, \$9.91 left over

Challenge 2: Store A: $\$45.00 \times 1.06 = \47.70 | Store B: $\$42.50 \times 1.06 = \45.05 | Store C: $\$43.99 \times 1.06 = \46.63

Store B is cheapest. Saves $\$47.70 - \$45.05 = \$2.65$ compared to Store A (most expensive).