

Sales Tax Budget Challenge

A real-world percentages workout · 6% sales tax

Name: _____ Date: _____

Learning Objectives

In this worksheet you will practice: calculating sales tax on purchases, determining total cost after tax, making budget-conscious decisions, and applying percentages to real-world scenarios.

How to Calculate Total Cost with Sales Tax

Sales tax is an extra amount added to the price of items you buy. A quick way to find the total cost in one step:

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

Why 1.06? The 1 stands for the original price (100%) and the 0.06 stands for the 6% sales tax. Together (1.06) gives you the total in one multiplication.

Tax Rate: 6% **Your Budget:** \$50.00

Example Problem

Item: Video Game Controller **Price before tax:** \$42.00 **Tax Rate:** 6%

Step 1: Total cost = $\$42.00 \times 1.06 = \44.52

Step 2: $\$44.52 < \$50.00 \rightarrow \text{YES, you can afford it!}$ Money left over: $\$50.00 - \$44.52 = \$5.48$

For each item: find the total, decide if it fits your \$50 budget, and show how much is left.

Price before tax: \$40.00 Tax Rate: 6%

\$

\$

\$

Price before tax: \$20.00 Tax Rate: 6%

\$

\$

\$

\$

Problem 3: Skateboard

Price before tax: \$47.00 Tax Rate: 6%

Total Cost (Price $\times$ 1.06): \$

Can you afford it? YES / NO \$

Money left over (if yes): \$ _____

Problem 4: Wireless Earbuds

Price before tax: \$52.00 Tax Rate: 6%

Total Cost (Price $\times$ 1.06): \$

Can you afford it? YES / NO

Amount over budget (if no): \$

Problem 5: Art Supply Set

Price before tax: \$35.00 Tax Rate: 6%
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Sales Tax Amount (Price $\times$ 0.06): \$ _____

Total Cost (Price + Tax): \$

Can you afford it? YES / NO

Money left over (if yes): \$

Problem 6: Headphones

Price before tax: \$50.00 Tax Rate: 6%

Sales Tax Amount (Price $\times$ 0.06): \$ _____

Total Cost (Price + Tax): \$

Can you afford it? YES / NO

Amount over budget (if no): \$

Problem 7: Board Game

Price before tax: \$15.00 Tax Rate: 6%

Sales Tax Amount (Price $\times$ 0.06):

\$

\$

Total Cost (Price + Tax):

\$

Can you afford it? YES / NO

\$

Money left over (if yes):

Problem 8: Backpack

Price before tax: \$25.00 Tax Rate: 6%

Sales Tax Amount (Price $\times$ 0.06):

\$

\$

Total Cost (Price + Tax):

\$

Can you afford it? YES / NO

\$

Money left over (if yes):

Challenge Problems

Stretch your thinking. Show all your work in the space provided.

Challenge 1: Smart Budget Shopping

Pick **two items** from the practice problems above. Find a pair you could buy together while staying within your **\$50 budget**. Show your work.

Item 1:	_____
Item 1 Total Cost:	\$ _____
Item 2:	_____
Item 2 Total Cost:	\$ _____
Combined Total:	\$ _____
Within budget?	YES / NO

Challenge 2: Working Backwards

You bought a pair of shoes. After adding 6% sales tax, the total was exactly **\$53.00**. What was the original price **before tax**?

Hint: If x is the original price, then $x \times 1.06 = \$53.00$

To find x , divide both sides by 1.06.

Show your work:

Original price before tax: \$ _____

Reflection Questions

Write a sentence or two for each question.

1. Why is it important to calculate sales tax **before** making a purchase?

2. What is one quick strategy you could use to estimate if you can afford an item while shopping?

3. How does sales tax affect your purchasing power? Explain in your own words.

Answer Key

For teachers only.

#	Item	Price	Tax (6%)	Total	Affordable?	Left Over / Over
1	Bluetooth Speaker	\$40.00	\$2.40	\$42.40	YES	\$7.60 left
2	Basketball	\$20.00	\$1.20	\$21.20	YES	\$28.80 left
3	Skateboard	\$47.00	\$2.82	\$49.82	YES	\$0.18 left
4	Wireless Earbuds	\$52.00	\$3.12	\$55.12	NO	\$5.12 over
5	Art Supply Set	\$35.00	\$2.10	\$37.10	YES	\$12.90 left
6	Headphones	\$50.00	\$3.00	\$53.00	NO	\$3.00 over
7	Board Game	\$15.00	\$0.90	\$15.90	YES	\$34.10 left
8	Backpack	\$25.00	\$1.50	\$26.50	YES	\$23.50 left

Challenge 1 — sample affordable pairs (totals shown with tax):

Combination	Combined Total	Within \$50?
Basketball + Board Game	\$37.10	YES
Board Game + Backpack	\$42.40	YES
Basketball + Backpack	\$47.70	YES
Accept any pair whose totals (with tax) sum to \$50.00 or less.		

Challenge 2 — Original price = $\$53.00 \div 1.06 = \50.00