

LESSON

Reteach**7-10** *Using Percents*

There are many uses for percents.

Common Uses of Percents

Discounts	A discount is an amount that is subtracted from the regular price of an item. discount = regular price • discount rate
Tips	A tip is an amount added to a bill. tip = total bill • tip rate
Sales Tax	Sales tax is an amount added to the price of an item. sales tax = purchase price • sales tax rate

Rachel is buying a sweater that costs \$42. The sales tax rate is 5%.
About how much will the total cost of the sweater be?

You can use fractions to find the amount of sales tax.

First round \$42 to \$40.

Think: 5% is equal to $\frac{1}{20}$.

So, the amount of tax is about $\frac{1}{20} \cdot \$40$.

The tax is about \$2.00.

Then find the sum of the price of the sweater and the tax.

$$\$42 + \$2.00 = \$44.00$$

Rachel will pay about \$44.00 for the sweater.

Solve each problem.

1. About how much would you pay for a meal that costs \$29.75 if you left a 15% tip?

2. About how much do you save if a book whose regular price is \$25.00 is on sale for 10% off?

3. About how much would you pay for a box of markers whose price is \$5.99 with a sales tax rate of 9.5%?

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Rachel is buying a sweater that costs \$42. The sales tax rate is 5%. About how much will the total cost of the sweater be?
You can use fractions to find the amount of sales tax.
First round \$42 to \$40.
Think: 5% is equal to $\frac{1}{20}$.
So, the amount of tax is about $\frac{1}{20} \cdot \$40$.
The tax is about \$2.00.
Then find the sum of the price of the sweater and the tax.
 $\$42 + \$2.00 = \$44.00$
Rachel will pay about \$44.00 for the sweater.

Solve each problem. Estimates may vary.

- About how much would you pay for a meal that costs \$29.75 if you left a 15% tip?
\$34.50
- About how much do you save if a book whose regular price is \$25.00 is on sale for 10% off?
\$2.50
- About how much would you pay for a box of markers whose price is \$5.99 with a sales tax rate of 9.5%?
\$6.60



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LESSON 7-10 Challenge
Shop Smart



The Sport Zone and Sport City are both competing for customers by offering big discounts. To be a smart customer, you need to decide which store is offering the better price on each item.



For each item, write the store offering the best deal and the price you will pay there to the nearest whole cent.

The Sport Zone Sport City

- 


The Sport Zone: \$118.99
- 


Sport City: \$30.30
- 


The Sport Zone: \$15.50
- 


Sport City: \$42.20

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LESSON 7-10 Problem Solving
Using Percents

Use the table to answer each question.

Federal Income Tax Rates, 2001

Single Income	Tax Rate	Married Joint Income	Tax Rate
\$0 to \$27,050	15%	\$0 to \$45,200	15%
\$27,051 to \$65,550	27.5%	\$45,201 to \$109,250	27.5%
\$65,551 to \$136,740	30.5%	\$109,251 to \$166,500	30.5%
\$136,741 to \$297,350	35.5%	\$166,501 to \$297,350	35.5%
More than \$297,350	39.1%	More than \$297,350	31.5%

- If a single person makes \$25,000 a year, how much federal income tax will he or she have to pay?
\$3,750
- If a married couple makes \$148,000 together, how much federal income tax will they have to pay?
\$45,140
- The average salary for a public school teacher in the United States is \$42,898. If two teachers are married, what is the average amount of federal income taxes they have to pay together?
\$23,593.90
- In 2002 President George W. Bush received an annual salary of \$400,000. Vice President Dick Cheney got \$186,300. How much federal income tax do they each have to pay on their salary if they are married and filing jointly?
Bush: \$126,000;
Cheney: \$66,136.50
- A married couple each working a minimum-wage job will earn an average of \$21,424 together a year. How much income tax will they pay?
F \$5,891.60 H \$321.36
G \$3,213.60 J \$6,534.32
- The governor of New York makes \$179,000 a year. How much federal income tax does that governor have to pay at a single rate?
F \$63,545 H \$49,225
G \$54,595 J \$26,850

Circle the letter of the correct answer.

- Members of the U.S. Congress each earn \$145,100 a year. How much federal income tax does each pay on their salary?
A \$51,510.50 **C** \$21,765
B \$44,255.50 **D** \$39,902.50
- The average American with a college degree earns \$33,365 a year. About how much federal income tax does he or she have to pay at a single rate?
A \$5,004.75 **C** \$10,176.33
B \$9,175.38 **D** \$11,844.58

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LESSON 7-10 Reading Strategies
Use a Graphic Organizer

This chart shows common ways percents are used. It also shows you how to figure a discount, sales price, sales tax, total price, tip, and total cost of a meal.

Discount An amount subtracted from the regular price of an item • Discount = regular price • discount rate • Sales price = regular price – the discount	Sales Tax An amount added to the price of an item • Sales tax = purchase price • sales tax rate • Total price = regular price + sales tax
Uses for Percents	
Tip The amount added to a bill for service • Tip = price of meal • tip rate	

Use the graphic organizer to answer each question.

- What do you call the amount subtracted from the regular price of an item?
discount
- What do you call the amount added to a bill for service?
tip
- What do you call an amount added to the price of an item?
sales tax
- How do you find the discount?
multiply the regular price times the discount rate
- How can you find the amount of sales tax on an item?
multiply the purchase price times the sales tax rate
- How is a total bill for a meal figured?
add the price of the meal and the tip

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