

Grade 7 - Percent Problems: Tax, Tips, Discounts and Markups - Worksheet

Common Core 7.RP.A.3 · maths-pdf.fr/en/

Name: _____ Class: _____ Date: ____/____/____

These 20 problems practice multistep percent problems: sales tax, tips, discounts, markups, commission, simple interest, percent change, and percent error (Common Core 7.RP.A.3). They start with the basic skill, move to different kinds of numbers and multistep work, and end with six word problems set in everyday situations such as shopping, sports, and travel.

Show every step of your work, and use the answer key only after you have tried each problem.

Grade 7 · Common Core State Standards: **7.RP.A.3**

Exercise 1 - Percent of a number

Find 15% of 80.

Exercise 2 - Sales tax

Liam buys a \$25 baseball glove. The sales tax rate is 8%. Find the tax and the total cost.

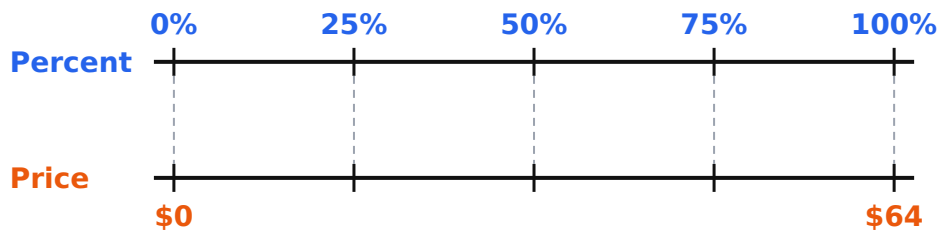
Exercise 3 - Restaurant tip

Bill	Rate	Tip
\$42	18%	?

The bill and tip rate.

The dinner bill is \$42. Sofia leaves an 18% tip. Find the tip.

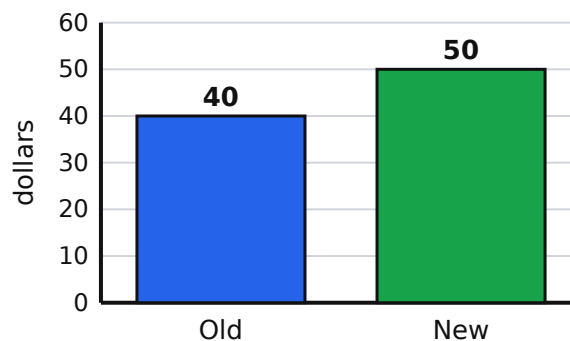
Exercise 4 - Jacket discount



A \$64 jacket.

A jacket costs \$64. It is on sale for 25% off. Find the discount and the sale price.

Exercise 5 - Percent increase



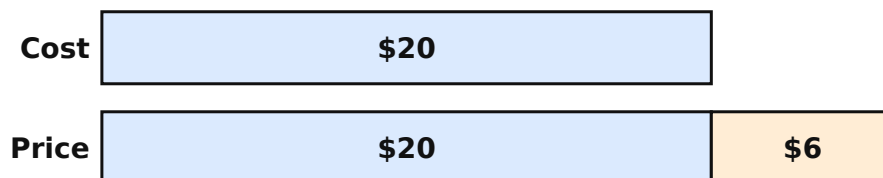
Price change.

A video game rose in price from \$40 to \$50. Find the percent increase.

Exercise 6 - Percent decrease

The temperature at noon was 80 degrees. By evening it was 60 degrees. Find the percent decrease.

Exercise 7 - Markup



Cost plus markup.

A bookstore buys a poster for \$20 and marks it up 30%. Find the selling price.

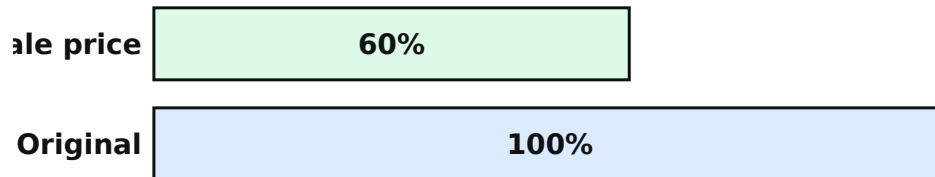
Exercise 8 - Commission

Diego earns 6% commission on his sales. He sells \$2,500 of bikes. Find his commission.

Exercise 9 - Simple interest

Find the simple interest on \$800 at 3% per year for 4 years.

Exercise 10 - Find the original price



A 40% discount leaves 60%.

Aisha pays \$36 for a pair of shoes after a 40% discount. Find the original price.

Exercise 11 - Percent error

Mei measures a table as 48 inches. The actual length is 50 inches. Find the percent error.

Exercise 12 - Find the tax rate

The tax on a \$50 purchase is \$3.40. Find the tax rate as a percent.

Exercise 13 - Bill with tip

Ethan's lunch bill is \$36. He leaves a 20% tip. Find the total he pays.

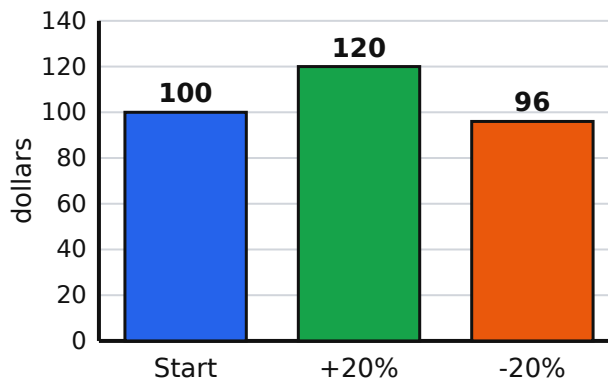
Exercise 14 - Discount then tax

A \$80 jacket is 25% off. Then 7% sales tax is added to the sale price. Find the final cost.

Exercise 15 - Town growth

The population of a town grew from 12,500 to 13,750. Find the percent increase.

Exercise 16 - Up then down



A price changes twice.

A \$100 video game goes up 20%, and then the new price goes down 20%. Find the final price and explain why it is not \$100.

Exercise 17 - Loan

Jamal borrows \$1,200 at 5% simple interest per year for 2 years. Find the interest and the total amount he repays.

Exercise 18 - Store profit

A store pays \$45 for a backpack and marks it up 60%. During a sale the price drops 20%. Find the sale price and the store's profit on one backpack.

Exercise 19 - Base pay plus commission

Priya earns \$400 a week plus 4.5% commission on sales. Last week her sales were \$6,000. Find her total pay.

Exercise 20 - Estimate error

The school estimated 1,200 fans at the game. The actual attendance was 1,000. Find the percent error of the estimate.