

Solving Multistep Percent Problems with Tax, Tips and Discounts

Grade 7 math · Test · Standards: 7.RP.A.3

Name: _____ Date: _____ Class: _____

This test has 8 questions worth 20 points and fits 45 minutes. Show every calculation, write money amounts with two decimal places, and label each answer. No percent formulas are given on the page.

Standards: 7.RP.A.3 · **Level:** Grade 7

Time: 45 minutes · 8 questions · Total: 20 points · Calculator: as allowed by your teacher

Question 1 Tip on Dinner (2 points)

A dinner costs \$52.00 and the customer tips 20%. Find the tip and the total.



A meal and its tip.

Question 2 Jeans Sale and Tax (2 points)

Jeans cost \$64 and are 35% off. A 7.5% sales tax is then charged on the sale price. Find the total.

Question 3 Simple Interest Account (3 points)

A deposit of \$1,500 earns 4.2% simple interest per year.

- Find the interest after 5 years. (1 point)
- Find the balance after 5 years. (1 point)
- After how many years has the account earned \$126 in interest? (1 point)

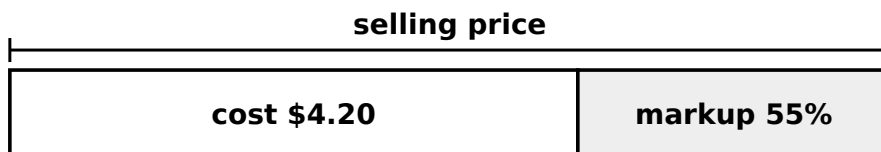
Question 4 Weekly Pay with Commission (3 points)

Mr. Lopez earns \$450 per week plus 3.5% of his sales. In one week his sales are \$6,800.

- Find his commission. (1 point)
- Find his total pay. (1 point)
- How much must he sell to earn \$800 in a week? (1 point)

Question 5 Pie Shop Markup (3 points)

A bakery's cost for one pie is \$4.20 and it uses a 55% markup.



Cost and markup.

- Find the markup amount. (1 point)
- Find the selling price. (1 point)
- Find the revenue from selling 12 pies. (1 point)

Question 6 Price Before Tax (3 points)

A bike helmet costs \$63.60 including 6% sales tax.

- Find the price before tax. (2 points)
- Find the amount of tax. (1 point)

Question 7 Two Discounts (2 points)

An item that costs \$200 is discounted 30%, and then the sale price is discounted by another 15%.



Two discounts in a row.

- Find the final price. (1 point)
- Is this the same as a 45% discount? Explain. (1 point)

Question 8 Ticket with Fees (2 points)

An online ticket costs \$45. A 12% service fee based on the ticket price and a flat \$3 shipping charge are added. Find the total.