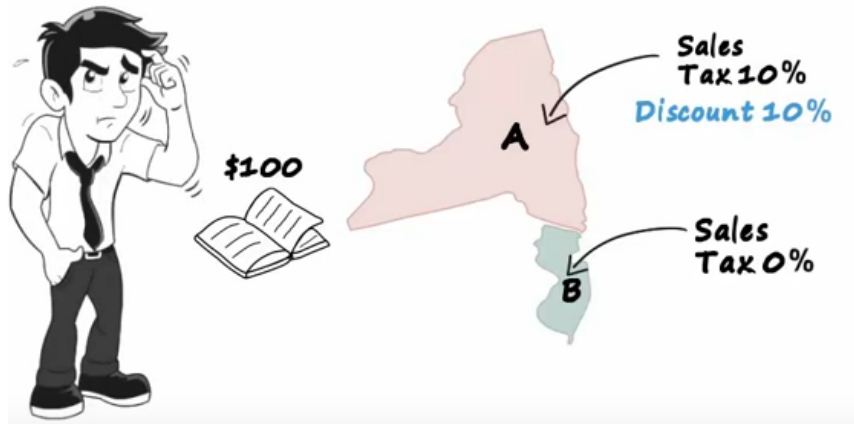


Write your
questions here!

GN 5.4 – Advanced Percent Equations

Video



Activity

Quick explanation of why we cannot _____ or _____ separate percentages.

Example: *Let's say you are order a pizza. You are hungry an eat 50% of the pizza. Then your friend comes over and eats 50% of what remains.*

Step 1: Draw a picture of a whole pizza.	Step 2: Draw a picture of 50% of the pizza eaten.	Step 3: Draw a picture of 50% of 50% of the pizza eaten.

Discovery:

Extension: Write you own double % story problem involving the picture below and solve it.



Example 1:

A pair of shoes costs \$46.99. You have a coupon for 15% off. What is the **total cost** of the sneakers after 5% sales tax is included?

Example 2:

At a restaurant, you order a meal that costs \$12. You leave a 20% tip. The sales tax is 5%. What is the total cost of the meal?

Now,
summarize
your notes
here!



5.4 PRACTICE PROBLEMS

Solve the double percent problems.

1. You have a coupon for an additional 15% off the price of any sale item at the store. The store has a picture frame on sale for 30% off the original price of \$60. What is the price of the picture frame after both discounts are applied?

Equation: _____

2. A pair of jeans costs \$115.60 and you have an employee discount for 20% off. What is the total price you have to pay after the discount and a 6% sales tax?

Equation: _____

3. A comforter at Bed Bath & Beyond is \$99 and you have a 20% off coupon. The same comforter is \$99 at JC Penny's but is on sale for 15% off. You also have a coupon for 5% off your total purchase at JC Penny's. Which is better deal?



Equation 1: _____

Equation 2: _____

4. At a restaurant, you order a meal that costs \$12. You leave a 20% tip. The sales tax is 6%. What is the total cost of the meal?

Equation: _____

5. At best buy they have a 42" TV that sells for \$1250 and is on sale for 15% and sales tax is 6.5%. What is the final cost?

Equation: _____

6. If you go out to eat with 3 friends and your meal was \$72.50, there is 6% sales tax and you should tip the waiter 15%. How much should each person pay?

Equation: _____

Explain the student's error below.

7. A \$140 car stereo is marked up 50% and then discounted 50%. Find the final price of the car stereo after the markup and the discount.

Student Answer: Since the mark up and discount are the same the final price of the car stereo will be \$140.

Equation: _____

5.4 Applications

(Real Life Stories from Mrs. Urquhart for on the class website)

Example 1: Hop House Dilemma

Part 1: Read the introduction below and pick out what you would order from the menu if you were me.

Mrs. Urquhart, "On my first day as the new math teacher in Pittsburgh PA, all the teachers went out to eat after school. I was excited to meet everyone and establish my new identity at this new workplace."

Drink: _____

Meal: _____

Part 2: Online, watch both the Act 1 & Act 2 Videos.

Part 3: Without doing any scratch work or using a calculator, guess how much you could spend before tax and tip.

Low Guess	Official Guess	High Guess

Part 4: List any information or tools you might need in order to solve this problem?

Part 5: Solve.

Part 6: Check your answer with the Act 3 video. How close was your guess? Could you order what you originally selected in part 1?

Part 7: If Mrs. Urquhart only had \$15, how much could she spend before tax and tip? \$25?