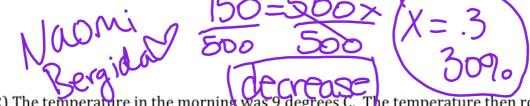
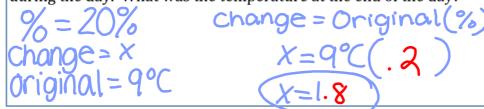
Do Now

1) Last year, there were 500 students in chorus. This year, there are 350 students in chorus. Find the percent change.



2) The temperature in the morning was 9 degrees C. The temperature then rose 2% during the day. What was the temperature at the end of the day?



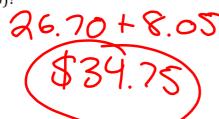
Lesson #36 - Tax and Tip (Gratuity)

When you add TAX to an item, the cost of the item

When you want to add a tip (gratuity), the final amount you pay is _____ than the original amount.

Example 1) Answer the following.

A) You and 3 friends go out to dinner. The bill before tax is \$26.70. The tax is \$8.05. What is the final amount you pay (without tip)?



B) You are going to see a play on Broadway. When you get out of Penn Station, you need to take an Uber to Time's Square. The Uber costs \$5.25 from Penn Station to Time's Square. Your Uber driver was very nice, so you decided to give him a \$3 tip. What is the final dollar amount you are paying for the Uber?



Recall: Write the following formulas below.

Percent Equation	Percent Change Equation

We can now add another two formulas to our list:

<u>Tax</u>	Tip (Gratuity)
Tax = original(%)	Tip = original(%)
PERCENTS MUST BE DECIMALS	**PERCENTS MUST BE DECIMALS**

Example 1) Rachel's school supply items totaled \$142. She had to pay a 6% tax.

Part A) How much tax did Rachel have to pay?

Part B) What was the final cost of Rachel's school supplies after tax?

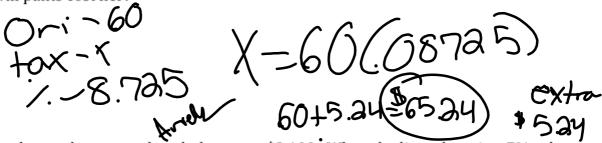
Example 2) A restaurant bill is \$70 (including tax). You got great service, so you want to leave a 20% tip.

Part A) How much of a tip will you leave?

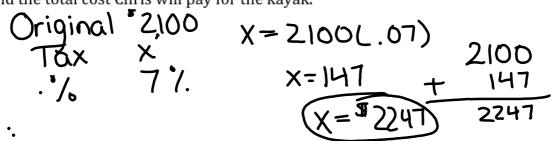
Part B) What will be the total amount you will pay for the meal?

Now, You Try!

3) Madison buys a pair of pants that were priced at \$60. There is 8.725% sales tax. How much will pants cost her?



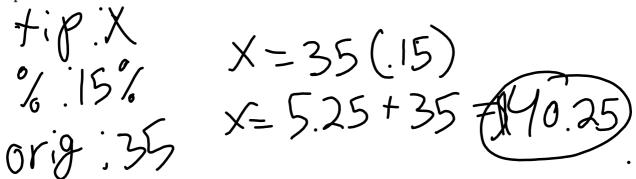
4) Chris plans to buy a new kayak that costs \$2,100. Where he lives there is a 7% sales tax. Find the total cost Chris will pay for the kayak.



5) On Jason's vacation, he hired a guide for \$50. Jason wants to tip the guide 10%. How much will Jason have to spend?



6) Blaise wants to tip 15% on a restaurant bill that is \$35. What will be the total bill with tip?



Challenge Problems

7) Lexi's family stayed at a hotel for 10 nights on their vacation. The hotel charged a 10% room tax, per night. How much did they pay in room taxes if the room cost \$200 per night?

7. :10

8) Anthony went out to dinner with 4 of his friends. The bill came to \$85.34. After paying a 7.5% tax and 18% tip, how much did each person pay?

9) Andrea paid her cab driver a total of \$12.50 after tip. If she tipped 15% of the fare before the tip, what was her fare before tip?