

Name _____

Date _____

Mr. Tallman

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.

<u>Percent Equation</u>	<u>Percent Change Equation</u>

We can now add another two formulas to our list:

<u>Tax</u>	<u>Tip (Gratuity)</u>
$\text{Tax} = \text{original}(\%)$ <p>**PERCENTS MUST BE DECIMALS**</p>	$\text{Tip} = \text{original}(\%)$ <p>**PERCENTS MUST BE DECIMALS**</p>

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?

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?