

5.3 Notes – Percent Applications

Accelerated 7/8

(Discounts, Markups, Sales Tax, Commission, and Tipping)

NAME: _____

DATE: _____ PD: _____

I CAN...

- Solve real life percent problems involving

- tax

- gratuities (tip)

- commissions.

- mark-ups and mark-downs.

IF YOU TAKE TIME TO THINK ABOUT IT, I BET YOU CAN THINK OF MANY EXAMPLES OF PERCENTS IN YOUR LIFE. GRADES AT SCHOOL, SPORTS STATISTICS, OR TAX AT THE STORE, FOR EXAMPLE, ALL INVOLVE PERCENTS. WE ARE GOING TO USE OUR KNOWLEDGE OF WRITING PERCENTS AS PROPORTIONS TO BECOME BETTER SHOPPERS AND EXPERT TIPPERS AT RESTAURANTS.

Vocabulary: Fill in the blanks below using the following words:

Sales Tax, Discount, Tip, Markup, Wholesale Price, Retail Price, Commission

_____ How much a store pays for an item.

_____ How much a customer pays for the item. (the amount on the price tag)

_____ An extra amount given by customers for good service, usually at restaurants.

_____ A decrease from the original price of an item to the sale price of an item.

_____ An increase from the *wholesale price* to the *retail* price

_____ An extra charge added to the bill at stores. In Columbus, it is 6.75%

_____ A percent of the total sales a person makes.

Markup

A store buys a product at a cheaper price then they're going to sell it to you. So, they markup their prices so that they make a profit. *Find amount of markup, then add to wholesale price.*

Finding a retail price.

A store buys DVD players for \$50. The store marks up the price by 110%. What is the retail price of a DVD player?

1 - How much is the markup? (We are looking for 110% of \$50).

The store marks the price up \$_____

2 - Add the amount of markup to the wholesale price.

The store sells you the DVD player for \$_____

1.) **Pair of shoes:**
Wholesale price: \$15
Markup: 180%

2.) **Video Game:**
Wholesale price: \$10.50
Markup: 420%

3.) **Book:**
Wholesale: \$13.20
Markup: 95%

Discounts:

When there is a sale, or you have a coupon, you get a discount on an item. You must be careful if you are being asked to find the amount of the discount or the actual sale price of the item. *Find amount of discount, then subtract from original price.*

Finding a sale price

Video games are on sale at Best Buy for 15% off. The game you want to buy is \$64. What is the sale price of the video game?

1 - How much is the discount? (We are looking for 15% of \$64).

The amount of the discount is \$_____.
(Depending on the question, this might be the answer.)

2 - Subtract the amount of the discount from the original price.

The video game will cost \$_____ after
receiving the discount.

4.) Bike:
Original Price: \$135
Discount: 15%

5.) Car:
Original Price: \$18,950
Discount: 20%

6.) TV:
Original Price: \$1249
Discount: 8%

Tax:

An amount that is charged on almost everything you buy that is paid to the government. *Find the amount of tax, then add to the retail price.*

Your bill at Barnes and Noble is \$62.45 before tax. If the sales tax is 6.75%, what is the total price?

Total = bill + amount of tax

Total = + () Must change percent to a decimal.

Total = + ()

Total = + Round to the nearest cent.

Total = _____

You can also break it down into two steps:

1. Find the tax
2. Find the new

7.) Bill: \$78.90
Sales Tax: 7%

8.) Bill: \$22.30
Sales Tax: 6.5%

9.) Bill: \$190.54
Sales Tax: 6.75%

Tipping:

Find tip amount, then add to bill.

Jackson takes his family out to dinner. The total bill comes to \$84.38. Jackson was happy with the service, so he gave a 20% tip to the server. How much did Jackson spend?

Find amount of tip: 20% OF \$84.38

Tip = _____

Total bill = cost of meal + tip

10.) Food Bill: \$54.80
Tip: 15%

11.) Food Bill: \$9.80
Tip: 18%

12.) Food Bill: \$18
Tip: 20%

The common tip to give at a restaurant is 20%. Can you describe a method that helps you figure out a 20% tip in your head? Explain your thoughts, and explain **why** this works. No calculators or cell phones allowed! :)

Commission:

Most sales people earn an extra percentage of what they sell. (Realtors, car salesmen, furniture, even shoes!). *Find the amount of the commission.*

Will made a 3% commission on a house he sold. The house sold for \$225,000. How much commission did Will;earn?

Find amount of commission: 3% OF \$225,000

Will's commission _____

13.) House price: \$309,500
commission: 6%

14.) furniture sales: \$3,750
commission: 8.5%

15.) car price: \$25,799
commission: 9%

Mixed Practice

1. Nick was given an 18% tip waiting on a table of customers who ordered \$60.00 in food and drinks. How much did Nick earn in tips waiting on this table?

2. Maddie finds a sale on tires. She buys four tires that normally sell for \$48.00 each. If the tires are 20% off, how much will Maddie pay for the 4 tires?

3. It costs Rachel \$1.49 to make a glass of strawberry lemonade. She marks up her drink by 34%. How much does she charge for a glass of strawberry lemonade?

4. Emilee found a cute new pair of shoes she just has to have! They cost \$52.00 and there is a 7.25% sales tax at Polaris Fashion Place. How much will Emilee have to pay for the shoes?

5. Luke and Stephen split the 6% commission they made selling a house for \$320,500. How much did each of them receive?

6. ****Double discount time!**** CJ went shopping at Old Navy. They were having a store wide sale and everything was 15% off! She decided to buy a pair of jeans that originally cost \$35.00, a shirt that cost \$19.00, and a pair of flip flops for \$5.00. Because she has an Old Navy credit card, she received an additional 10% off her discounted total. What was CJ's total for her new outfit? (Before tax of course!)

7. A sports store is having a sale on in-line skates. You want to buy a pair of in-line skates that originally costs \$135. The sales tax is 5.5%, and it will be applied to the sale price of the skates. What is the total cost of the skates?

