## Real World Applications

People will use throughout their lives. We use percents to find out discounts and sales. People who work in sales will use percentages to calculate their commission. They are also used in calculating interest for investments or loans and other financial objects. When you go out to buy a product at a store and you need to figure out the sales tax you will need skills in percentage problems. If you are still in school, percentages will help you calculate your GPA and class grades. The word problems will help when people ask you questions about some percentage.


Isaiah Batista Math 015 Professor Abar Ucc 101
Professor Fiarotta

## How-To Work <br> Percent Word Problems

Percent word problems are not as difficult as people think. The only confusing parts are converting the percents to decimals and figuring out whether it is going to be a percent increase or a percent decrease. It helps to do the problems in steps.

First, begin figuring out whether you are going to have a percent increase or decrease. If you have an increase you will take the percent you need to add and change it to a decimal. Next multiply by the amount given. Finally you will take that product and add it to the original amount to be increased.

If you have to decrease the percentage, take the percentage, subtract it from 100, the new percentage will be remaining. After, multiply the new percentage by the given amount and you will have the answer.

Ex. 1 My laptop costs $\$ 850.99$ but I need to add a $7 \%$ sales tax to it. What will be my final costs?

Add a 7\% increase.

$$
7 \%=0.07
$$

$850.99 \times .07$
$=59.57$
$850.99+59.57$
Final Price $=\$ 910.56$

Ex. 2 A store has a 20\% OFF sale. You go and buy $\$ 200$ in merchandise.
What will be your final price.
Decrease of 20\%

100-20
= 80\%
$80 \%=.8$
$\$ 200 \times .8$
Final Price $=\$ 160$

Today there was a sale at Sports Authority; they are giving a 20\% discount on the total you spend. I spent 279.99 on a snowboard. What was the final price?

## Answer:

My investment company is offering 8\% interest on any amount that is less than $\$ 2000$ for two years. What would be the final amount earned if I invest $\$ 1700$ ?

## Answer:

A sales associate makes $7 \%$ commission on everything he sells in an electronics store. A customer enters and buys a $\$ 2700$ television and a $\$ 1200$ entertainment system. What did the salesman make on the sale?

## Answer:

