Remember: When dealing with prices ($) you need to round to the nearest hundredth (0.00)

Markdowns and markups

MARKDOWNS

Discount– a reduction in price

To find the amount of a discount: Change the discount % to a decimal and multiply that by the original cost

To find the sale price: Subtract the amount of discount from the original cost

Discount = regular price x rate of discount

Sale price = regular price - discount

EXAMPLE

A store that sells video games had a 15% discount on all used games. Alex bought a used game which cost $29.99.

What was the price of the game after the discount?

Step 1:

Find the percent of the number using proportions

$$\frac{x}{29.99} = \frac{15}{100}$$

Step 2:

subtract the per cent to your original total

29.99 - 4.50

EXAMPLE ANSWER

The 15% discount of $29.99 is $4.50 (after being rounded).
You subtract $4.50 from $29.99 to get the sale price of:

$25.49

MARKUPS

A markup is the percent of increase

- The overall number will go up instead of down

Amount of markup = cost x (times) markup rate

Selling price = cost + amount of markup

FORMS OF MARKUP

These are times will you'll find the percent of the overall value then ADD the percent to it.

- **Sales Tax**– percent of the purchase price
- **Tips**– percent of a bill from a service provided
- **Commission**– the amount a salesperson earns on a sale

They all follow the same markup formula.

EXAMPLE

Paul buys a handful of items for $43.39. The sales tax for all of this is 7%. How much did Paul have to spend AFTER adding the sales tax?

Step 1:

Find the percent of the number using proportions

$$\frac{x}{43.39} = \frac{7}{100}$$

Step 2:

add the per cent to your original total

$43.39 + 3.08 = $46.47

EXAMPLE ANSWER

The 7% tip from $43.39 is $3.08. You add that total to the original price (3.08 +43.39) to get the total cost including tax, which would be

$46.47

SHORTCUT FOR MARKUPS

Multiply your overall value by the percent (turned decimal) plus 1

Example:

7% tax on $15.

15.00 x 1.07 = $16.05 (total cost including tax)