Unit 1

1.4 On Sale

David Guenther

Preamble

Objective

10.10:Apply proportional reasoning to solve problems involving unit pricing and currency exchange. [CN, ME, PS, R, T]

- Determine the percent increase or decrease from an original price to a new price and explain the reasoning for the method

Definitions

Promotion: something to get people to buy more, but lowing the price

Start

Intro

Companies have sales all the time, and they use percentages to convince customers to buy their product.

The same method is used for calculating sales tax, except this time it is in your favour!

Big Sale in Town

Lets say I'm standing in the middle of superstore, and suddenly a voice over the intercom says, everything is now 40% off. What would be the best thing to take advantage of this deal?

- Cereal?
- Fruits and Vegetables?
- Or the most expensive thing in the store?

What the intercom has said is such. 40% of the initial price comes off of the final price.

Remember yesterday when we found 10% of 10? It was one. So if I have a sale that takes 10% off of 10, I would have

$$10 - (10\% of 10)$$

It is really important to remember that when we have a sale amount, the total amount will usually be *smaller* then the initial amount.

There is also another more convenient way to do this.

We know that we're working with this equation:

$$(100\% \times x) - (10\% \times x)$$

Assuming of course that it is 10% off.

NOTE: remember that 10% equals

$$\frac{10}{100}$$

If we combine like terms, we have 100% - 10%, or 90%. This means could have taken 90% off of our initial price and found what we wanted.

This trick also works for finding the tax. Have 10% tax? You just need to work the other way. Add 10% to 100% to get 110%, and then multiply that by your initial price to find the tax. Its a great way to save yourself an extra step.

So, to return, If the only think I cared about was money, on a 40% sale I would want to buy the most expensive thing, because that would be the most amount of money that I wouldn't have to pay.

But remember: your not actually saving money when you buy something on sale. It is still cheaper not to buy, then to buy something on sale.

Bottom line is this: don't let things become idols in your lives. remember that everything is either an idol, or a tool. use things like they are tools.

But lets say I want to go the other way around. What would the percentage be off if I had savings on10 dollars to be reduced to 6 dollars?

For your project you also need to check out if you can find items on sale. In the front of superstore there are coupons. Check to see if items you need are on sale. Or check http://www.walmart.ca/en to see if you can find savings as well

Example 1

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Example 2

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Assignment

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End activity

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Open answers to questions 1, 2, 3.