

# Numbers in Retail Discounts

## Transcript

**Narrator:** This skate shop is clearing out some clothing and accessory lines to make way for a new shipment of stock. Selected items have been reduced by 10 percent. This sales assistant's task is to reprice the sale items and for that he'll need to use some math. To work out the new prices of the sale items, there are two steps to calculating the new prices. First, we work out what 10 percent of the price of each item equals, then we subtract that figure from the original price.

We'll set up a table to record all our numbers. To start with, here are the current prices of each of the items that will be discounted by 10 percent. When calculating 10 percent of any number, it's the same as dividing that number by 10. Using a calculator, simply enter the original price, then divide by 10. Or multiply it by 10 and hit the "percent" and "equals" buttons. It's easy without a calculator too—we just shift the decimal point one place to the left. So for the skate shoes costing \$119.50, we shift the decimal point one place to the left and it equals \$11.95.

Now for the second step. The new sale price of the shoes is equal to the original price minus 10 percent. \$119.50 minus \$11.95 equals \$107.55. We'll add those figures into the table. The original price of hats is \$25.00. Shift the decimal point one place to the left, so 10 percent of that figure is \$2.50. \$25.00 minus \$2.50 equals \$22.50. That's the new sale price of the hats. Back to the table. The hoodies: original price \$69.50. Ten percent of that equals \$6.95. \$69.50 minus \$6.95 equals \$62.55. Into our table. And shirts: original price \$29.00. So 10 percent equals \$2.90. \$29.00 minus \$2.90 equals \$26.10. The completed table looks like this. The sale items can now be repriced.

This skate shop has a large student customer base. Students get 10 percent off all full-priced stock, plus an extra 5 percent discount on any sale items. So how much would a student pay for a pair of skate shoes on sale? This time we start with the sale price, which is \$107.55, and using a calculator, we work out 5 percent of that figure to get the discount amount. 107.55 times 5 percent equals 5.3775, which we'll round up to 5.38. Now we subtract \$5.38 from the price we started with—in this case, \$107.55—and we get \$102.17. That's what a student would pay for the discounted skate shoes.

Another way of calculating a 5 percent figure is by working out 10 percent and dividing it by 2 because 5 percent is half of 10 percent. Ten percent of \$107.55 equals 10.755, which we'll round up to 10.76. 10.76 divided by 2 equals 5.38.

A sound understanding of basic division and subtraction functions in mathematics is essential for calculating discounts and sale prices. While calculators and cash registers make it easy to quickly calculate figures in a retail environment, they'll only give accurate answers if they're used with the correct processes in mind.