

Numbers in Retail Cash Handling

| Transcript



Narrator: In this vintage market, a range of rented stalls sell an array of antique, retro, and other collectable items. While customers are offered electronic payment facilities, many prefer to use cash. And while cash register software can calculate any change needed, it's very useful to know how to work it out yourself.

This pair of shoes is priced at \$37.85. If a customer hands over a \$50 bill to purchase the shoes, how much change must they be given? We can easily calculate this without technology using mental maths. Our mathematical expression is \$50 minus \$37.85. And by regrouping, we know that \$37.85 is made up of \$30 plus \$7 plus 80 cents plus 5 cents. So we start by subtracting \$30 from \$50. That equals \$20. Now we'll subtract the \$7, which gives us \$13. Now we'll subtract the 80 cents, which gives us \$12.20. Finally we'll subtract the 5 cents and our answer is \$12.15. That's the customer's change.

When the change is given, what is the smallest number of bills and coins that can be handed over to the customer? The amount is \$12.15. Let's regroup that number into the currency we have to work with. So we use one \$10 bill, two \$1 bills, one dime and one nickel.

Some customers like to use up their loose change, which clears their wallet or purse of coins. So with this transaction, suppose a customer hands over a \$50 bill and 3 quarters and a dime. How much change must they be given then? Let's look at the math again in a different way.

This time, it's \$50.85 minus \$37.85. Five minus 5 equals 0, and 8 minus 8 equals 0, and we'll put the decimal point in. Zero minus 7 isn't possible, because 7 is greater than 0. So we borrow 10 from the 10s column, making 10 minus 7 which equals 3. This is now 4 minus 3 because of the 10 we've carried across. So 1 goes here, and it's exactly \$13 in change. This time, the smallest number of bills and coins we can use is one \$10 bill and three \$1 bills.

Technology makes cash handling and calculating change easy and quick, but knowing how to perform simple math calculations is very useful. Whether you use mental math or the traditional right-to-left method, or any other, it enables customers to make sure they've received the right change and helps employees know what to do even when the power goes out.