

Numeracy in Retail

Cash Handling

Transcript

Narrator: In this vintage market, a range of stallholders 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 note to purchase it, 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 eighty pence plus five pence. 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 eighty pence, which gives us £12.20. Finally we'll subtract the five pence and our answer is £12.15. That's the customer's change.

When the change is given, what is the least number of notes 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 note, one £2 coin, one ten pence piece and one five pence piece.

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 note and eighty-five pence. How much change must they be given then? Let's see the maths again in a different way.

This time, it's £50.85 minus £37.85. Five minus five equals zero and eight minus eight equals zero, and we'll put the decimal point in. Zero minus seven isn't possible, because seven is greater than zero. So we borrow ten from the tens column, making ten minus seven which equals three. This is now four minus three because of the ten we've carried across. So one goes here, and it's exactly £13 change. This time, the least number of notes and coins we can use is one £10 note, one £2 coin and one £1 coin.

Technology makes cash handling and calculating change easy and quick, but knowing how to perform simple maths calculations is very useful. Whether you use mental maths 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.