

Calculating tax

In the story Ji-Hoon used math to find out the total cost of the scooter including the sales tax. Ji-Hoon used his calculator to help him. You might want to use one too.

Let's break down how he did it.

The price of the scooter was \$19.99 + tax.

Tax in British Columbia is 12%, but different provinces have different percents. To do the math we'll multiply the cost of the scooter by the percentage of tax. It's easier if you write 12% as a decimal: 0.12.



$$\begin{array}{r}
 \$19.99 \quad \text{cost of the scooter} \\
 \times 0.12 \quad (12\%) \\
 \hline
 \$2.40 \quad \text{amount of tax on the scooter}
 \end{array}$$

12% of \$19.99 is \$2.40. That's the amount of tax on the scooter.

Second, Ji-Hoon added the tax to the cost of the scooter:

$$\begin{array}{r}
 \$19.99 \quad \text{cost of the scooter} \\
 + \$2.40 \quad \text{amount of tax} \\
 \hline
 \$22.39 \quad \text{total cost of scooter}
 \end{array}$$

The total cost of the scooter, including the tax, is **\$22.39**.



Take it further

Can you calculate how much Ji-Hoon's scooter would have cost if he had to pay 5%, 13%, or 15% tax instead? Remember that it helps to change to write the percent as a decimal before you multiply.

Not ready to work with percents? Try counting backwards instead. Start with \$20 and count back until you reach \$0. If you want an extra challenge, try counting backwards by 5 too.