

Most people would love to purchase a brand-new vehicle. The problem is, they are extremely expensive. New vehicles have a listed **sticker price** but they come with many options that can be added for an extra cost. Some options include air conditioning, sun roof, power locks, power brakes, fancy wheels, heated seats, etc. Furthermore, there are additional charges that are not optional, such as freight charges and taxes on air conditioning.

Remember to consult the tax table (previous page) to determine the appropriate taxes for each situation.

Example 1: Purchasing a New Car

A two door Dodge has a sticker price of \$18 500. In addition, a sport model package is chosen at a cost of \$875 and a stereo system worth \$990 is installed. Freight on the vehicle is \$1250 and an air conditioning tax of \$100 is charged. Find the total cost of the vehicle, after taxes. (12%)

$$\begin{aligned}
 \text{TOTAL COST} &= \text{Sticker Price} + \text{sports model package} + \text{stereo system} + \text{Freight} + \text{Air conditioning} + \text{taxes} \\
 &= 18500 + 875 + 990 + 1250 + 100 + 12\% \text{ Taxes} \\
 &= 21715 \times 1.12 \\
 &= \boxed{\$ 24\,320.80}
 \end{aligned}$$

TOTAL COST of Vehicle

Example 2: Purchasing a New Car with a Trade-In (Trade-in values are deducted before calculating taxes)

Jasdeep is looking to purchase a new Ford Escape, which is worth \$27 439 after freight and air conditioning tax. Jasdeep would like to trade in his 2007 Honda CRV. The dealership agrees to give him \$4000 for his trade-in. Calculate the final cost of the new car after trade-in and taxes.

*NOTE: Taxes on a new car are calculated AFTER the trade-in value has been deducted from the price.

$$\begin{aligned}
 \text{① Cost of Vehicle} &= \text{Worth of Vehicle} - \text{Trade-in value} + 12\% \text{ taxes} \\
 &= 27\,439 - 4000 + 12\% \text{ taxes} \\
 &= \$ 23\,439 + 12\% \text{ taxes} \\
 &= 23\,439 \times 1.12 \\
 &= \boxed{\$ 26\,251.68}
 \end{aligned}$$