

4.3 Sales Tax and Price Markups

We pay sales tax on most items in BC. The provincial sales tax (PST) is 7% while the goods and services tax (GST) is 5%. Total: 12%

Prices for goods and services rise and fall due to consumer supply and demand. The cost of materials and labour also contribute to price adjustment. An additional amount, called **markup**, is added to these costs so that a **profit** can be made. The markup is usually a percent of the wholesale price.

Examples

Ex 1. A furniture store in BC is selling a bedroom suite. The list price for the suite is \$1599.00.

a) What will the total cost be including GST and PST? 5% + 7% = 12%

① Find tax: 12% of \$1599.00
 $0.12 \times 1599 = \$191.88$

② Add tax to item cost.
 $= \$1599 + \$191.88 = \$1790.88$

b) How can you find the total cost with tax in one step?

Paying 100% of \$1599, plus another 12% tax \Rightarrow 112%
 $112\% \text{ of } \$1599$
 $1.12 \times 1599 = \$1790.88$

Ex 2. Kelsea is purchasing fabric at a wholesale price for her custom sewing business. She pays \$46.00/m for the fabric. Her markup is 20% of the fabric cost. What will Kelsea charge her client per meter?

20% of \$46
 $0.20 \times \$46 = \9.20 markup

$\$46 + \$9.20 = \$55.20/m$

100% + 20% = 120%
 120% of \$46
 $1.20 \times 46 = \$55.20/m$

Ex 3. John spent \$2500 on a used car and parts needed to fix it up. If he sold it for \$3700, what percent profit did he make?

$\% \text{ profit} = \frac{\text{profit}}{\text{original price}} \times 100\%$

Profit = $\$3700 - \$2500 = \$1200$

$\% \text{ Profit} = \frac{\$1200}{\$2500} \times 100\%$
 $= 0.48 \times 100 = 48\%$