

Sec 5.4 Sales Tax and Discount

1) **Finding Discount**

Again, we can use cross multiply to find the sale price after a discount.

$$\frac{\text{Percent Discount}}{100} = \frac{\text{Discount (\$)}}{\text{Regular Price}}$$

Example – A backpack costs \$30. It is on sale for 20% off. Find the sale price.

The discount (\$) is _____. Therefore, the sale price is _____.

$$\text{Regular Price} - \text{Discount (\$)} = \text{Sale Price}$$

Your Turn – Calculate the sale price of the following items.

a) \$200 tv with a 8% discount

b) \$40 pants with a 30% discount

c) At a discount of 25%, bicycles are on sale for \$240. What is the regular price?

d) The sale price of a printer is \$90. If there were a 40% discount, what was the regular price?

2) **Finding Tax**

Again, we can use cross multiply to find the tax to add to an item.

$$\boxed{\frac{\text{Percent Tax}}{100} = \frac{\text{Tax (\$)}}{\text{Price of item}}}$$

Example – A backpack costs \$30. Including 5% GST and 7% PST, find the total price.

The tax (\$) is _____. Therefore, the total price is _____.

$$\text{Price of item} + \text{Tax (\$)} = \text{Total Price}$$

Your Turn

- a) You go to McDonald's for a \$6 breakfast. If you have to pay 5% GST, what is the total cost of your meal?
- b) You and your friend want to go watch the Vancouver Canucks. The regular price of a ticket is \$75 but due to Fan Appreciation day, there is a discount of 33%. If both PST and GST must be paid, what is the total cost of a ticket?

3) Percent of a Percent

Example – Best Purchase offers a 10% off discount one day and then an additional 10% off the sale price the next day. If the item originally costs \$30, find the sale price on the next day.

Your Turn

- a) An iPod regularly priced at \$200 is on sale for 10% off. However, the next day is Customer Appreciation day so the store is giving an additional 15% off the previous day's sale price. What is the sale price of the iPod on the next day?
- b) Which store offers the better buy? Explain your thinking.
- Store A: 50% off one day only
 - Store B: 25% off one day followed by 25% off the reduced price the second day