

8.5 Percents & Financial Literacy

Example 1: Total Cost

Suppose GST is 5% and PST is 7%. Calculate the total tax and total cost of a sound system that is priced at \$250.

12% tax
100% price + 12% tax
112% of 250
 $1.12(250) = \$280$

Example 2: Total Cost After a Discount

A \$420 bike you want to buy is 30% off! What will you pay for the bike after 7% PST and 5% GST?

112% of 70% of 420
 $1.12(0.7)(420) = \$329.28$

Example 3: Combining Discounts

A gaming system, usually \$400, is 20% off. You find a coupon for another 40% off, including sale items.

- a) What is the final sale price (with both discounts applied)?

60% of 80% of \$400
 $0.6(0.8)400 = \$192$

- b) What is the single overall discount?

$0.6(0.8) = 0.48 = 48\% \text{ paid}$

52% discount
 $\frac{208}{400} = 0.52$