

Calculating the Sale Price & Total Cost of a Purchased Item

Discount: The amount saved and subtracted from the original price of an item to get the discounted price.

Example 1: In a video store, a DVD that **sells for \$15** is marked, "**10% off**". What is the discount? What is the sale price of the DVD?

Solution: The discount rate is 10%. Convert the rate to a decimal: $\frac{10\%}{100\%} = 0.10$
The discount is: $0.10 \times \$15.00 = \1.50
The sale price is calculated as follows:

	original price	-	discount
	\$15.00	-	1.50
	= \$13.50		

Answer: The discount is \$1.50 and the sale price is \$13.50.

Example 2: What is the total cost of the DVD, knowing that you will have to pay 13% HST

Solution: The price is \$13.50.

Convert the HST to a decimal: $\frac{13\%}{100\%} = 0.13$

The discount HST is: $0.13 \times \$13.50 = \1.76

The total price is calculated as follows:

	sale price	+ HST	
	\$13.50	+ 1.76	= \$15.26

Answer: The HST is \$1.76 and the sale price total cost is \$15.26.

Scenario #1

- Jackson wants to purchase a bicycle.
- He has **3 one-hundred dollar bills** and **4 fifty dollar bills**.
- Cycles Unlimited is selling one for **\$550.00**.
- They are offering **24% discount**, if cash is paid.
- **13% HST** must be paid on all purchases

1. What would be the discount Jackson receives by paying cash?	
2. What would be the discounted price of the bicycle?	
3. What would be the HST on the purchase?	
4. How much money would Jackson actually spend to purchase the bicycle?	
5. How much cash does Jackson have in total?	
How much change will Jackson receive?	