

Example 4

Francois needs to pay for the following repairs to his vehicle:

Item	Labour Time Required	Cost of Parts
Side View Mirror	2.7 hours	\$970
New Brake Light Cover	0.8 hours	\$290

a) Calculate the total labour cost, before taxes, if the service center charges \$105/hour.

$$\begin{aligned} \text{TOTAL LABOUR COST} &= \text{Labour time} \times \text{hourly charge} \\ \text{① Labour time} &= (2.7 + 0.8) \times 105 \\ &= 3.5 \text{ hrs} \times 105 \\ &= \boxed{\$ 367.50} \end{aligned}$$

- sideview mirror = 2.7 hours
 - New Brake light = 0.8 hrs
 - hourly charge = \$105/hr

b) Calculate the total amount that Francois will pay to the service centre, after taxes.

$$\begin{aligned} \text{Total Repair cost (including labour)} &= \text{Cost of parts} + \text{Labour Cost} + \text{Taxes} \\ &= (970 + 290) + 367.50 + 12\% \\ &= \$ 1627.50 \times 1.12 \\ &= \boxed{\$ 1822.80} \end{aligned}$$

- Labour Cost = \$367.50
 - Cost of Parts = 970 + 290
 taxes = 12%

Example 5

Emily brought her vehicle into a service centre in Manitoba for a tune-up. The tune-up included the following items:

Item	Details	Cost
Replace windshield wipers	2 wipers	\$12 per wiper
Oil Change	4 L oil	\$3 per litre
	1 filter	\$22 per filter
Labour	2.5 hours	\$110 per hour

Calculate the total cost of the tune-up after taxes.

$$\begin{aligned} \text{Cost of tune-up} &= \text{wipers} + \text{oil} + \text{filter} + \text{Labour} + \text{Taxes} \\ &= (2 \times \$12) + (4 \times \$3) + (1 \times \$22) + (2.5 \times \$110) + 12\% \text{ Taxes} \\ &= (24 + 12 + 22 + 275) + 12\% \\ &= \$ 333 + 12\% \text{ Taxes} \\ &= 333 \times 1.12 \\ &= \boxed{\$ 372.96} \end{aligned}$$

Cost after taxes