

NAME \_\_\_\_\_

HW # \_\_\_\_\_

1. Marcus wants to buy a NY Rangers jacket from a clothing store in Queens. The price of the jacket is \$80 and the sales tax is 8%.

$$\text{tax} = \% \times \text{price}$$

$$n = (.08)(80)$$

$$n = \$6.40$$

- a) Calculate the tax he will have to pay on the jacket.

- b) Calculate the total cost of the jacket.

$$\$80 + \$6.40 = \boxed{\$86.40}$$

- c) If Marcus has \$90, will he have enough money to buy the jacket?

Marcus will have enough money since \$90 is greater than \$86.40

2. Sears is having a 35% off sale on all tires. Michelin tires usually sell for \$125 each.

- a. Calculate the sale price of a Michelin tire.

$$\text{discount} = \% \times \text{price}$$

$$n = (0.35)(125)$$

$$n = \$43.75$$

$$125 - 43.75 = \boxed{\$81.25}$$

- b. If Jerry wants to buy four Michelin tires, calculate his total purchase price if the tax rate is 8%.

Cost of the tires:

$$81.25 \times 4 = \$325$$

$$\text{tax} = \% \times \text{price}$$

$$n = 0.08 \times 325$$

$$n = \$26$$

$$325 + 26 = \boxed{\$351}$$

3. Shana wants to buy a new bicycle that has a retail price of \$259.99. She knows that it will be on sale next week for 30% off the retail price. If the tax rate is 7%, find the total amount, to the nearest cent, that she will save by waiting until next week.

$$\text{disc} = \% \times \text{price}$$

$$n = (0.30)(259.99)$$

$$n = \$78.00$$

Sale price:

$$259.99 - 78.00$$

$$\$181.99$$

$$\text{tax} = \% \times \text{price}$$

$$n = (0.07)(181.99)$$

$$n = \$12.74$$

Final price:

$$181.99 + 12.74$$

$$\boxed{\$194.73}$$

4. A \$5600 plasma TV is discounted at 20%. Find the sale price.

$$\text{disc} = \% \times \text{price}$$

$$n = (0.20)(5600)$$

$$n = 1120$$

$$5600 - 1120$$

$$\boxed{\$4480}$$

5. An item priced at \$500 was sold for \$450. What was the discount rate?

$$\text{disc} = \% \times \text{orig. price}$$

$$\frac{50}{500} = \frac{n\% \times 500}{500}$$

$$0.1 = n\%$$

$$\boxed{10\%}$$