

# Discount and Tax

Discount: a percentage of the original cost that is

**SUBTRACTED**  
from the original cost.

Example: sweater: \$35

sale for 15% off

①  $\frac{X}{35} = \frac{15\%}{100}$

②  $100X = 35 \cdot 15$   
 $100X = 525$   
 $\frac{100X}{100} = \frac{525}{100}$

$X = \$5.25$

③  $\begin{array}{r} 24.9 \\ 35.00 \end{array}$

$- 5.25$  (discount)  
 $\hline$   
 $\$29.75$

**SALE PRICE!**

SALE

iPhone: \$300

sale 20% off tax 8%

$$\textcircled{1} \frac{x P}{300 W} = \frac{20\%}{100}$$

$$\textcircled{2} \frac{100x}{100} = \frac{300 \cdot 20}{100}$$

discount →  $x = 60$

$\textcircled{3}$  300.00  
 - 60.00 (discount)  
 \$240.00  
 SALE PRICE

SALE

TV: 900

sale 10% off

tax 6%

$$\frac{x P}{900 W} = \frac{10\%}{100}$$

$$\frac{100x}{100} = \frac{9000}{100}$$

$x = 90$  discount

900  
 - 90  
 810 sale price

810

$$\textcircled{1} \frac{x P}{240 W} = \frac{8\%}{100}$$

$$\textcircled{2} \frac{100x}{100} = \frac{240 \cdot 8}{100}$$

Tax →  $x = 19.20$

$\textcircled{3}$  240.00  
 + 19.20 (tax)  
 \$259.20  
 TOTAL COST

TAX

$$\frac{x P}{810 W} = \frac{6\%}{100}$$

$$\frac{100x}{100} = \frac{810 \cdot 6}{100}$$

$x = 48.60$  tax

810.00  
 48.60  
 858.60 TOTAL

858.60

TOTAL