

Example 4

$$\frac{\text{disc/tax change}}{\text{orig}} = \frac{p}{100} \quad \frac{25}{100} = .25$$

Luke wants to purchase a new TI-84 graphing calculator at Staples. It costs \$130, and there is a sale for 25% off. What is the price that Luke will pay?

What is 25% of \$130?

$$x = .25 \cdot 130$$

$$x = \$32.50 \leftarrow \text{discount}$$

$$\begin{array}{r} \$130.00 \\ - 32.50 \\ \hline \boxed{\$97.50} \end{array}$$

Example 5

$$\frac{6}{100} = .06$$

Tim bought a pair of running shoes for \$75. There was a 6% sales tax. Find the tax and the total price that Tim paid.

What is 6% of \$75?

$$x = .06 \cdot 75$$

$$x = \$4.50 \leftarrow \text{tax}$$

$$\begin{array}{r} \$75.00 \\ + 4.50 \\ \hline \boxed{\$79.50} \end{array}$$

Example 6

Allie is purchasing a new laptop that originally costs \$599. She is getting a 15% student discount and has to pay a 7% sales tax.

What is the total price?

discount $\frac{15}{100} = .15$
 What is 15% of \$599?

$$x = .15 \cdot 599$$

$$x = \$89.85 \text{ disc}$$

$$\begin{array}{r} \$599.00 \\ - 89.85 \\ \hline \$509.15 \end{array}$$

sales tax $\frac{7}{100} = .07$
 What is 7% of \$509.15?

$$x = .07 \cdot 509.15$$

$$x = \$35.64 \text{ tax}$$

$$\begin{array}{r} \$509.15 \\ + 35.64 \\ \hline \boxed{\$544.79} \end{array}$$