Chapter 2 Percents

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3. First, find the amount of the discount. $20\% \text{ of } \$7.50 = 0.20 \cdot 7.50 \qquad \text{Write the percent as a decimal.} \\ = \$1.50 \qquad \text{The discount is }\$1.50 \\ \text{Next, subtract the discount from the regular price.} \\ \$7.50 - \$1.50 = \$6.00 \\ \$7.50 - \$1.50 = \$6.00 \\ \$7.5\% \text{ of }\$6.00 = 0.0575 \cdot 6.00 \qquad \text{Apply the tax. Write }\$7.5\% \text{ as a decimal.} \\ = \$0.35 \\ \text{Add the tax to the sale price.} \\ \$6.00 + \$0.35 = \$6.35 \\ \text{The cost of the ticket, including tax, is }\$6.35. \\ \end{cases}$

5. The sale price is 100% – 50% or 50% of the original price. Let *p* represent the original price. 2.25 = 0.5 p $\frac{2.25}{0.5} = \frac{0.5 p}{0.5}$

$$4.5 = p$$

So, the original price is \$4.50.