## Markup \& Markdown Problems Worksheet

1. A ski shop has a markup rate of $50 \%$. Find the selling price of skis that cost the storeowner \$300.
2. A tennis supply store pays a wholesaler $\$ 90$ for a tennis racquet and sells it for $\$ 144$. What is the markup rate?
3. A shoe store is selling a pair of shoes for $\$ \mathbf{6 0}$ that has been discounted by $\mathbf{2 5} \%$. What was the original selling price?

## Markup \& Markdown Problems Worksheet

1. A ski shop has a markup rate of $50 \%$. Find the selling price of skis that cost the storeowner \$300.

Solution 1: Use the original price of $\$ 300$ as the whole. The markup rate is $50 \%$ of $\$ 300$ or $\$ 150$. The selling price is $\$ 300+\$ 150=\$ 450$.
Solution 2: Multiply $\$ 300$ by 1 plus the markup rate (i.e., the selling price is $(1.5)(\$ 300)=\$ 450$ ).
2. A tennis supply store pays a wholesaler $\$ 90$ for a tennis racquet and sells it for $\$ 144$. What is the markup rate?

Let the original price of $\$ 90$ be the whole. Quantity $=$ Percent $\times W$ hole .

$$
144=\text { Percent }(90)
$$

$\frac{144}{90}=$ Percent
$1.6=160 \%$. This is a $60 \%$ increase. The markup rate is $60 \%$.
3. A shoe store is selling a pair of shoes for $\$ \mathbf{6 0}$ that has been discounted by $\mathbf{2 5} \%$. What was the original selling price?

$$
\begin{aligned}
& \begin{array}{l}
\$ 60 \rightarrow 75 \% \\
\$ 20 \rightarrow 25 \%
\end{array} \\
& \$ 80 \rightarrow 100 \% \\
& \text { The original price was } \$ 80 .
\end{aligned}
$$

