## Lesson 12 Summary

We can solve problems where there is a percent increase or decrease by using what we know about equations. For example, a camping store increases the price of a tent by $25 \%$. A customer then uses a $\$ 10$ coupon for the tent and pays $\$ 152.50$. We can draw a diagram that shows first the $25 \%$ increase and then the $\$ 10$ coupon.


The price after the $25 \%$ increase is $p+.25 p$ or $1.25 p$. An equation that represents the situation could be $1.25 p-10=152.50$. To find the original price before the increase and discount, we can add 10 to each side and divide each side by 1.25 , resulting in $p=130$. The original price of the tent was $\$ 130$.

