$\qquad$ Finding a Discount

## Key Concept and Vocabulary

A discount is a decrease in the original price of an item. To find the discount, write the percent as a decimal or fraction and multiply it by the original price of the item.


Visual Model

| 0\% | 20\% | 40\% | 60\% | 80\% | 100\% |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | , | ! |  |  |
| 0 | 15 | 30 | 45 | 60 | 75 |
|  | The sale price of a $\$ 75$ necklace with a $60 \%$ discount is $\$ 75-\$ 45=\$ 30$. |  |  |  |  |

## Application Examples

1. The original price of a book is $\$ 18.79$.

The discount is $20 \%$.
Estimate: Round 18.79 to 20 .

$$
0.2 \times 20=4
$$

$\therefore$ The estimate for the discount is $\$ 4$.
Actual: $0.2 \times 18.79 \approx 3.76$
$\therefore$ The actual discount is $\$ 3.76$. The sale price of the book is $\$ 18.79-\$ 3.76=\$ 15.03$.
2. The original price of a pair of in-line skates is $\$ 209.99$. The discount is $15 \%$.

Estimate: Round 209.99 to 200.

$$
0.15 \times 200=30
$$

$\therefore$ The estimate for the discount is $\$ 30$.
Actual: $0.15 \times 209.99 \approx 31.50$
$\because$ The actual discount is $\$ 31.50$. The sale price of the pair of in-line skates is $\$ 209.99-\$ 31.50=\$ 178.49$.

## PRACTICE makes PURR-FECT

## Estimate the discount. Then find the actual discount and the sale price.

3. TRUMPET The original price of a trumpet is $\$ 319.29$. The discount is $25 \%$.
\$75; \$79.82; \$239.47
4. SHOES The original price of a pair of shoes is $\$ 47.99$. The discount is $40 \%$.
\$20; \$19.20; \$28.79
5. LAMP The original price of a lamp is $\$ 17.09$. The discount is $15 \%$.
\$3; \$2.56; \$14.53
6. RING The original price of a ring is $\$ 96.75$. The discount is $60 \%$. \$60; \$58.05; \$38.70
7. ELECTRONICS The original price of a home theater system is $\$ 243.89$. The discount is $75 \%$. \$187.50; \$182.92; \$60.97
8. BASEBALL The original price of a baseball glove is $\$ 26.99$. The discount is $30 \%$. \$9; \$8.10; \$18.89
9. SEWING MACHINE The original price of a sewing machine is $\$ 182.96$. The discount is $20 \%$. \$40; \$36.59; \$146.37
