

Lesson Summary:

- Discount price = original price – rate \times original price OR $(1 - \text{rate}) \times \text{original price}$
- Commission = rate \times total sales amount
- Markup price = original price + rate \times original price OR $(1 + \text{rate}) \times \text{original price}$

Problem Set

1. What is $\frac{1}{32}$ commission of sales totaling \$24,000?
2. DeMarkus says that a store overcharged him on the price of the video game he bought. He thought that the price was marked $\frac{1}{4}$ **of** the original price, but it was really $\frac{1}{4}$ **off** the original price. He misread the advertisement. If the original price of the game was \$48, then what was the difference between the price that DeMarkus thought he should pay and the price that the store charged him?
3. What is the cost of a \$1200 washing machine that was on sale for a $\frac{1}{5}$ discount?
4. If a store advertised a sale that gave customers a $\frac{1}{4}$ discount, what is the fraction part of the original price that the customer will pay?
5. Mark bought an electronic tablet on sale for $\frac{1}{4}$ off its original price of \$825.00. He also wanted to use a coupon for a $\frac{1}{5}$ off the sales price. Before taxes, how much did Mark pay for the tablet?
6. A car dealer paid a certain price for a car and marked it up by $\frac{7}{5}$ of the price he paid. Later he sold it for \$24,000 what is the original price?
7. Joanna ran a mile in physical education class. After resting for one hour, her heart rate was 60 beats per minute. If her heart rate decreased by $\frac{2}{5}$, what was her heart rate immediately after she ran the mile?