1. A person purchases a television for $\text{674.99}. What is the sales tax amount if the sales tax rate is 8.95%?

2. The total price paid for a dining table was $\text{913.62}. The price tag indicates a purchase price of $\text{843.99}. What is the sales tax rate?
3. A sales person sells $2,973.56 worth of home appliances in one week. His commission rate is 15.75%. How much commission did he earn?

4. A recent paycheck showed that a sales clerk earned $1,234.53 for one month of sales. If the sales clerk sold $18,705.00 worth of merchandise, what is the commission rate?
Sales Tax and Commission

1. A person purchases a television for $674.99. What is the sales tax amount if the sales tax rate is 8.95%?

Recall: \( \frac{\%}{\text{Total}} = \text{Portion} \)
\[
\frac{\%}{\text{Tax}} \cdot \text{Purchase} = \text{Amount of Sales Tax}
\]
So to find the amount of sales tax, multiply the "\% Tax" by the "Purchase Price"!

\[
\frac{\text{Amount of Sales Tax}}{\text{(Sale's tax)}} = (0.0895) \cdot (674.99) = \$60.41
\]

Note: 8.95\% = 0.0895

2. The total price paid for a dining table was $913.62. The price tag indicates a purchase price of $843.99. What is the sales tax rate?

\[
\frac{\text{Amount of Sales Tax}}{\text{(Sale's tax)}} = \left( \frac{\text{Total}}{\text{(Price)}} - \left( \frac{\text{Purchase}}{\text{(Price)}} \right) \right)
\]
\[
= 913.62 - 843.99 = 69.63
\]
\[
\frac{69.63}{843.99} \cdot x = \frac{0.0825 \cdot x}{843.99}
\]
\[
0.0825 = \frac{x}{x} = 8.25\%
\]
3. A sales person sells $2,973.56 worth of home appliances in one week. His commission rate is 15.75%. How much commission did he earn?

\[
\frac{\text{Commission}}{\text{Total Sales}} \times 100 = \frac{2,973.56}{0.1575} = 468.34
\]

Answer: $468.34

4. A recent paycheck showed that a sales clerk earned $1,234.53 for one month of sales. If the sales clerk sold $18,705.00 worth of merchandise, what is the commission rate?

\[
\frac{\text{Commission}}{\text{Total Sales}} \times 100 = \frac{1,234.53}{18,705.00} = 0.066
\]

Therefore the commission rate is 6.6%!