

# CALCULATING WAGES & INCOME



## Personal Finance: Commission

The more sales I make, the more I will get paid.



# Lesson Objective

Students will learn how to calculate a sales based commission.

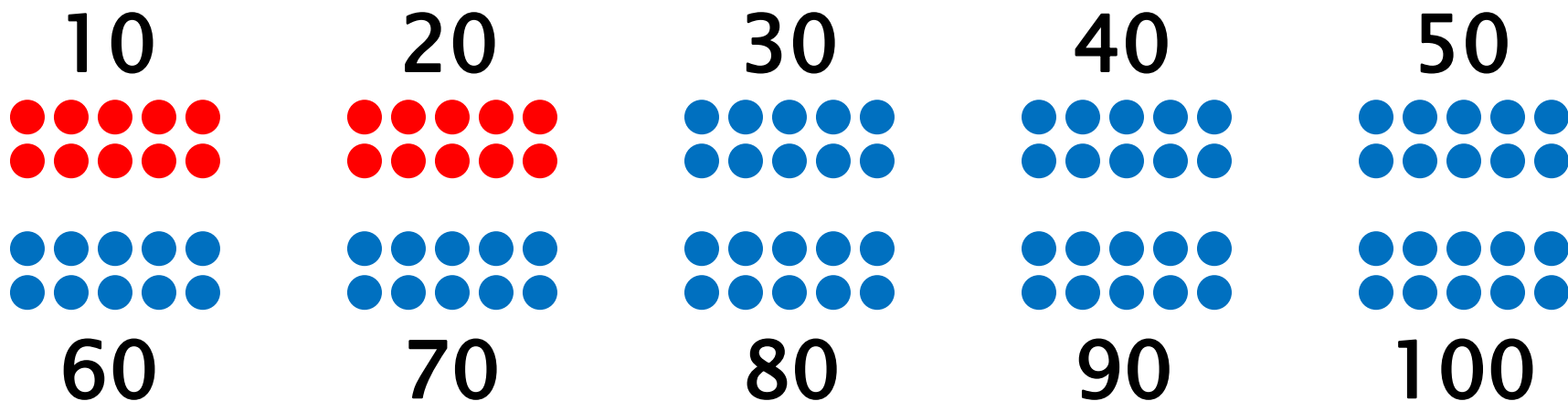


# Quick Review: Percents

A **percent** means per 100.

For Example:

20% is 20 parts per 100 parts.





# Quick Review: Percents to Decimals

To change a percent to a decimal:

Move the decimal to the left two spaces and get rid of the percent sign.

For Example:

$$83.5\% = 0.835$$

The image shows the conversion of 83.5% to the decimal 0.835. A blue diagonal line is drawn through the percent sign. Two blue curved arrows are positioned below the decimal point in 83.5, pointing to the left, indicating the movement of the decimal point two places to the left.



# Practice

Change these Percents to Decimals:

88%

75%

23%

124%

1.5%



# Practice

Change these Percents to Decimals:

88%

75%

23%

124%

1.5%

0.88

0.75

0.23

1.24

0.015



# Quick Review: Decimals to Percents

To change a decimal to a percent:

Do the opposite of what you did when going the other direction.

Move the decimal to the right two spaces and add a percent sign.

For Example:

$$0.654 = 65.4\%$$



# Practice

Change these Decimals to Percents:

0.36

0.56

1.97

.003

0.88





# Practice

Change these Decimals to Percents:

0.36

0.56

1.97

.003

0.88

36%

56%

197%

.3%

88%



# Commission

**Commission** is an income earned by an individual based on the sales the individual makes.

- Commission becomes part of the salesperson's salary (wages) – sometimes it is their only income. Other companies pay a salary plus a commission.
- Companies set their own rates for commissions so there is no absolute rule, but it is most often a percent of the sale price.



# Calculating Commission

The equation for calculating Commission:

$$\text{Sale Price} \times \text{Percent of Sale} = \text{Commission}$$



# Calculating Commission

How it works:

George sells diamonds. He earns 5% on his sales.  
He sells \$23,000 this week.

How much does he make in straight commission?



# Calculating Commission

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## Step 1

Change percent to decimal

$$5\% =$$

$$.05$$



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## Step 1

Change percent to decimal

$$5\% =$$

$$.05$$

## Step 2

\$23,000 Sales

x .05 Rate



# Calculating Commission

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How much does he make in straight commission?

## Step 1

Change percent to decimal

$$5\% = \\ .05$$

## Step 2

\$23,000	Sales
x .05	Rate
<hr/>	
\$1,150	



# Practice

These people sell diamonds. They earn commission based on the table. How much does each make in commission?

	Sales	Rate	Total Commission
Harrison	\$ 5,300	11%	
Kaitlynn	\$ 8,700	6%	
Samuel	\$ 1,600	12.5%	





# Practice

These people sell diamonds. They earn commission based on the table. How much does each make in commission?

	Sales	Rate	Total Commission
Harrison	\$ 5,300	11%	\$583
Kaitlynn	\$ 8,700	6%	\$522
Samuel	\$ 1,600	12.5%	\$200



# Calculating Commission: Quota System

There is a second way commission can be figured. It is based on a quota system.

Under this system, the salesman is encouraged to reach a specific quota (or level) in sales.

He will either earn an hourly rate before that level of sales, or his sales will be figured at a lower commission rate below that quota and a higher rate after that quota.



# Calculating Commission: Quota System

How it works:

John has a weekly quota on car sales of \$25,000.

For any sales up to his quota he earns 5% commission.

For any sales over \$25,000 he earns 9% commission.

If John sales \$30,000 worth of cars this week, how much does he make in commission?



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If John sales \$30,000 worth of cars this week, how much does he make in commission?

## Step 1

Change percents  
to decimals

$$5\% =$$
$$.05$$

$$9\% =$$
$$.09$$



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## Step 1

Change percents  
to decimals

$$5\% = \\ .05$$

$$9\% = \\ .09$$

## Step 2

$$\begin{array}{r} \$30,000 \text{ Sales} \\ - 25,000 \text{ Quota} \\ \hline \$5,000 \end{array}$$



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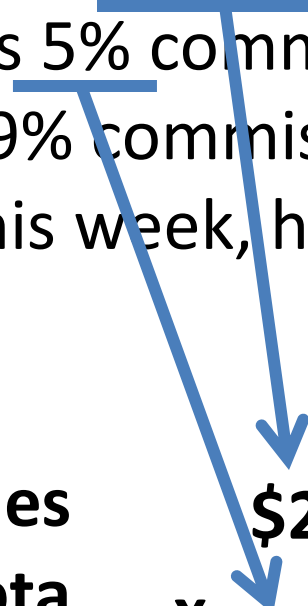
$$9\% = .09$$

## Step 2

$$\begin{array}{r} \$30,000 \text{ Sales} \\ - 25,000 \text{ Quota} \\ \hline \$5,000 \end{array}$$

## Step 3

$$\begin{array}{r} \$25,000 \text{ Quota} \\ \times .05 \text{ Rate} \\ \hline \$1,250 \end{array}$$





# Calculating Commission: Quota System

## Step 1

Change percents  
to decimals

$$5\% = .05$$

$$9\% = .09$$

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$$\begin{array}{r} \$25,000 \text{ Quota} \\ \times .05 \text{ Rate} \\ \hline \$1,250 \end{array}$$

## Step 4

$$\begin{array}{r} \$5,000 \text{ Above} \\ \times .09 \text{ Quota} \\ \hline \$450 \text{ Rate} \end{array}$$



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$$\begin{array}{r} \$5,000 \text{ Above} \\ \times .09 \text{ Quota} \\ \hline \$450 \text{ Rate} \end{array}$$

## Step 5

$$\begin{array}{r} \$1,250 \\ + 450 \\ \hline \$1,700 \end{array}$$





# Practice

These people also sell cars. They earn commission based on the table. How much does each make in commission?

	Sales	Quota	Rate Before Quota	Rate After Quota	Total Commission
Elise	\$ 5,300	\$ 4,000	5%	10%	
Kenya	\$ 8,700	\$ 4,000	7%	12%	
Thomas	\$ 1,600	\$ 4,000	8%	20%	



# Practice

These people also sell cars. They earn commission based on the table. How much does each make in commission?

	Sales	Quota	Rate Before Quota	Rate After Quota	Total Commission
Elise	\$ 5,300	\$ 4,000	5%	10%	<b>\$330</b>
Kenya	\$ 8,700	\$ 4,000	7%	12%	<b>\$844</b>
Thomas	\$ 1,600	\$ 4,000	8%	20%	<b>\$128</b>



# Review:

1. Which direction do you move the decimal if you want to change a percentage into a decimal?
2. What is the equation for commission?
3. If you earn 10% commission on \$3,596 in sales, how much is your commission?



# Review:

1. Which direction do you move the decimal if you want to change a percentage into a decimal?

To the Left.

2. What is the equation for commission?

$\text{Sales} \times \text{Percent} = \text{Commission}$

3. If you earn 10% commission on \$3,596 in sales, how much is your commission?

\$359.60