
Real Estate Math Made Easy!



by

Joyce Bea Sterling, DREI

Relax – Read Carefully – Learn

You will need pencil, paper and calculator to work the questions.
(At least most of us would need a calculator.)

For math to become easy for you, it is necessary to KNOW THE FORMULAS!
 Take the formulas in this book and convert them to index cards.
 Review the index cards until you KNOW THE FORMULAS!

The basic formula that you will use to work many math questions is called "The Magical T." Working a math problem does become "magical" when you know how to use the formula!

$$\begin{array}{c} \div \text{ Part } \div \\ \hline \text{Total} \quad | \quad \text{Rate} \\ \hline \times \end{array}$$

Rule 1 - When you have the **total** and the **rate**, the two numbers across the bottom, you always **MULTIPLY**.

Rule 2 - When you have the **part** and the **rate**, **DIVIDE** to get the total.
 The part goes in your calculator first.

Rule 3 - When you have the **part** and the **total**, **DIVIDE** to get your rate or percentage.
 The part goes in your calculator first.

Rule 4 - To convert a decimal to a percent, **MOVE** the decimal point 2 places to the **RIGHT** and add the percent sign.

EXAMPLE: A salesperson sold a property for \$50,000 and the brokerage firm was paid a 6% commission? How much was the firm paid?

Rule 1 - When you have the total and the rate, the two numbers across the bottom, you always **MULTIPLY**.

The total sale price was \$50,000, so it would go in the lower left of the "T."
 The commission rate was 6%, so it will go in the lower right of the "T."

$$\begin{array}{c} \text{?} \\ \hline \$50,000 \quad | \quad 6\% \end{array} \quad \begin{array}{c} \text{\$3,000 Commission \$} \\ \hline \$50,000 \quad | \quad 6\% (.06) \\ \text{Sale Price} \quad \times \quad \text{Commission Rate} \end{array}$$

EXAMPLE: At a closing the brokerage firm was paid a 6% commission and their check was for \$3,000. What was the sale price of the property?

Rule 2 - When you have the part and the rate, DIVIDE to get the total.

HELPFUL HINT: When you have the part at the top of the "T", and either one of the numbers at the bottom of the "T", remember TGIF. **Top Goes In First.** The top number is always touched into your calculator first!

The \$3,000 is the part and would go at the top of the "T".

The 6% is the rate and would go at the bottom right hand side of the "T".

\$3,000	\$3,000 Commission \$ ÷
?	\$50,000
6%	6% (.06)
	Sale Price Commission Rate

EXAMPLE: At a closing the brokerage firm was paid a \$3,000 on the selling price of \$50,000. What was the commission rate?

Rule 3 - When you have the part and the total, DIVIDE to get your rate or %.

The \$3,000 is a part and would go at the top of the "T."

The \$50,000 sale price is the total and would go at the bottom of the "T."

\$3,000	÷ \$3,000 Commission \$
\$50,000	\$50,000
?	.06 or 6%
	Sale Price Commission Rate

Rule 4 - To convert a decimal to a percentage, MOVE the decimal point 2 places to the RIGHT and add the percent sign.

Thus, in the above problem, the 0.06 decimal point is moved 2 places to the RIGHT, would equal 6%.

HELPFUL HINT: Many calculators are programmed to automatically convert the decimal place for you. Discover how your calculator works. Touch in \$50,000... then touch the multiplication key...then touch the 6 key...next the percent key, and finally the equal key. If your calculator automatically converts a number to a percentage by touching the percent button, then your calculator will read \$3,000. If your calculator does not read \$3,000, then you will have to convert 6% to .06 to get the correct answer to the above question. The above brokerage math formula is:

$$\frac{\div \text{Commission \$} \div}{\text{Sale Price} \mid \text{Commission Rate}}$$

$$\times$$

Sale Price \times Commission Rate = Commission \$

Commission \$ \div Commission Rate = Sale Price

Commission \$ \div Sale Price = Commission Rate

1. A broker listed a property for \$89,000. He sold it for \$85,400, and was paid a 7% commission. What was the commission paid?

Jayne sold a property for \$150,000. She was paid 7% on the first \$50,000 and 5% on everything over that amount. How much was she paid?

Step 1 \$150,000 Sale Price

50,000 - 7% commission

100,000 - 5% commission

? = Paid

The question tells us that the total sale price was \$150,000. On the first \$50,000, Jayne was paid 7%. On the balance of \$100,000 (\$150,000 - 50,000 = 100,000), she is to be paid 5%.

Step 2

$$\frac{\$3,500}{50,000 \mid 7\%}$$

$$\times$$

Step 3

$$\frac{\$5,000}{\$100,000 \mid 5\%}$$

$$\times$$

Step 4

$$\begin{array}{r} \$3,500 \\ + 5,000 \\ \hline \$8,500 \text{ Paid} \end{array}$$

EXAMPLE: A commission check was \$3,280. Carrie received 7% of the first \$30,000, and 5% on the remaining balance. What was the sale price?

Step 1

? - Sale Price
 \$30,000 - 7% commission
 ? balance - 5% commission
 \$3,280 - total commission paid

$$\begin{array}{r|l} \text{Step 2} \\ \$2,100 \\ \hline \$30,000 & 7\% \\ \hline & \times \end{array}$$

$$\begin{array}{r} \text{Step 3} \\ \$3,280 \\ - 2,100 \\ \hline \$1,180 \end{array}$$

Step 4

$$\begin{array}{r|l} \$1,180 \div \\ \hline \$23,600 & 5\% \end{array}$$

Step 5

$$\begin{array}{r} \$30,000 \\ + 23,600 \\ \hline \$53,600 \text{ Sale Price} \end{array}$$

2. Harry was paid 6% on the first \$40,000, 5% on the next \$30,000, and 4% on the remaining balance. The total commission paid was \$5,900. What was the sale price of the property? (Answer is on the next page.)

Hello,

At the beginning of the Dr. Phil show you hear him say,
"I want you to get excited about your life!"

I will add two more sentences to his statement:

"I want you to get excited about your successful real estate career!"

"I want you to get excited about math!"

Math is your financial score card. Learn the basics! Start with Real Estate Math Made Easy!

Basic Real Estate Brokerage, Finance, Appraising, Settlement, and Area Math Formulas are provided in this 40 page booklet. There are 28 questions with step-by-step answers.

When you pass your exam, make it a goal to live in the world debt-free.

Call or email if you have questions.

Joyce

jsterling@fuse.net

859-525-1114

P.S. Answers are on the next page.

1.
$$\frac{\$5.978 \text{ Commission } \$}{\$85,400 \text{ Sale Price} \times 7\% \text{ Commission Rate}}$$

If you get a question this easy on your state exam, email me!

2.
$$\begin{aligned} &? - \text{ Sale Price} \\ &\$40,000 @ 6\% \\ &\$30,000 @ 5\% \\ &? \text{ balance} @ 4\% \\ &\$5,900 @ \text{ Total Comm. Paid} \end{aligned}$$

$$\begin{array}{r|l} \$2,400 & \\ \hline \$40,000 & 6\% \\ \hline & \times \end{array} \quad \begin{array}{r|l} \$1,500 & \\ \hline \$30,000 & 5\% \\ \hline & \times \end{array}$$

$$\begin{array}{r} \$2,400 \\ + 1,500 \\ \hline \$3,900 \end{array} \quad \begin{array}{r} \$5,900 \\ - 3,900 \\ \hline \$2,000 \end{array} \quad \begin{array}{r|l} \$2,000 & \div \\ \hline \$50,000 & 4\% \end{array}$$

$$\$40,000 + 30,000 + 50,000 = \mathbf{\$120,000}$$