



## Math Relating to Brokerage Commissions and Splits

### 1. Percentage of Sale Price (Commission)

- A. Parts of the problem: (a) Sales Price, (b) Commission Rate, (c) Commission Earned, (d) Commission Splits
- B. The brokerage fee (commission) is normally based on a percentage (rate) of the actual sales price (not the listed price).
- C. Formulas/Examples:
  - I. To solve for the Commission:  $\text{Commission} = \text{Sales Price} \times \text{Rate}$
  - II. To solve for the Rate:  $\text{Rate} = \text{Commission} \div \text{Sales Price}$
  - III. To solve for the Sales Price:  $\text{Sales Price} = \text{Commission} \div \text{Rate}$

#### D. Commission Splits:

- I. In-House Splits: Gross commission will be split into company's share and agent's share based on the in-house split.

**Example:** In-house split is 50/50. Gross commission is \$6,000. Company gets:  $\$6,000 \times .50 = \$3,000$ . If listing agent and selling agent are the same, agent gets  $\$6,000 \times .50 = \$3,000$ . If listing agent and selling agent are different, listing agent gets  $\$3,000 \times .50 = \$1,500$  and selling agent gets  $\$3,000 \times .50 = \$1,500$ .

- II. Co-Brokerage Splits: Gross commission will be split based on MLS or co-brokerage arrangements. If split is 50/50 on a \$6,000 gross commission, listing company gets 50% or \$3,000 and selling company gets 50% or \$3,000. Each company would then split the commission based on their respective in-house splits.

### 2. Practice Problems

- A. Assume that the listing and selling brokers split a commission fifty-fifty and that they then split their shares of the commission fifty-fifty with their selling agents. If a house sold for \$100,500 in a co-brokered transaction, and the agent of the Realty Company that sold the house received a commission of \$1,780, what is the commission rate on the sale?

- (a) 4%                      (b) 5.5%                      (c) 6%                      (d) 7%

- B. A broker is to receive a 7% brokerage fee when a property is sold. How much less will be received in commission if the owner accepts an offer that is 6% less than the listed price of \$86,000?
- (a) \$860      (b) \$630.20      (c) \$710.20      (d) \$361.20
- C. A recent sale generated a gross commission of \$2,000. Agent A received 2% of the sales price, the Broker received 5% of the sales price, and Agent B received 3% of the sales price. How much in dollars did A, the broker, and B respectively receive from this sale?
- (a) \$400, \$1,000, \$600      (b) \$200, \$800, \$1,000
- (c) \$500, \$1,000, \$500      (d) None of the above
- D. Broker Jane sold a client's house for a commission of 6½%. The client received \$46,400 from the transaction after the commission was deducted. How much did Jane earn?
- (a) \$3,016      (b) \$2,977      (c) \$3,225.67      (d) \$2,831.92
- E. Ms. Smith listed her property for \$96,500 and subsequently sold for 9% less. What was the dollar amount of your commission if you received 30% of a 7% commission?
- (a) \$1,844.12      (b) \$1,884.12      (c) \$2,110.12      (d) \$1,950
- F. Compute the brokerage commission on the sale of a parcel of land with a frontage of 280 feet at \$80 per front foot if it is based on 10% of the first \$6,500 and 6% of the balance.
- (a) \$650      (b) \$954      (c) \$1,604      (d) \$1,406
- G. A house recently sold for \$95,000 at a commission rate of 6%. The MLS service gets 6% of the commission as a listing fee. The listing broker gets 34%, with 60% going to the selling broker. You, the selling agent, are on an in-house split 70% to you and 30% to the broker. What was your earned commission?
- (a) \$2,593.50      (b) \$1,469.50      (c) \$1,111.50      (d) \$2,437.89
- H. A property produces a rental income of \$5,000 per year for 15 years. The management broker's commission is based on 7% in year 1, 2% in years 2 and 3, 5% for the next 3 years, and 4% for the rest of the term. What is the total commission earned over the 15-year period?
- (a) \$3,100      (b) \$3,000      (c) \$2,500      (d) \$3,200

## Solutions to Commission Math Practice Questions

A. Four Way Split

$$\$1,780 \times 4 = \$7,120 \text{ Gross Commission}$$

$$\$7,120 \div \text{Sales Price} = .07 = 7\% \text{ (d)}$$

B.  $\$86,000 \times .07 = \$6,020$  Commission at listed price

$$\$86,000 \times .94 \text{ (100\% - 6\%)} = \$80,840 \text{ Actual sales price}$$

$$\$80,840 \times .07 = \$5,658.80 \text{ actual commission}$$

$$\$6,020 - \$5,658.80 = \$361.20 \text{ (d)}$$

C.  $2\% + 5\% + 3\% = 10\%$  Commission

$$\$2,000 \text{ Commission} \div .10 = \$20,000 \text{ Sales Price}$$

$$\text{Agent A: } \$20,000 \times .02 = \$400$$

$$\text{Broker: } \$20,000 \times .05 = \$1,000$$

$$\text{Agent B: } \$20,000 \times .03 = \$600 \text{ (a)}$$

D.  $100\% - 6.5\% = 93.5\% = .935$

$$\$46,400 \div .935 = \$49,625.67 \text{ Sales Price} \times .065 = \$3,225.67 \text{ (c)}$$

E.  $\$96,500$  listed price  $\times .91$  (100% - 9%) =  $\$87,815$  Sales Price  $\times .07 = \$6,147.05$  gross commission  $\times .30 = \$1,844.12$  (a)

F.  $280' \times \$80 = \$22,400$  Sales Price

$$\underline{-\$6,500} \times .10 = \$650$$

$$\$15,900 \times .06 = \underline{\$954}$$

$$\$1,604 \text{ (c)}$$

G.  $\$95,000$  Sales Price  $\times .065 = \$6,175$  gross commission

$$\$6,175 \times .60 = \$3,705 \text{ to selling broker}$$

$$\$3,705 \times .70 = \$2,593.50 \text{ to selling agent (a)}$$

$$\text{H. Year 1} = \$5,000 \times .07 = \$350$$

$$\text{Year 2 \& 3} = \$10,000 \times .02 = \$200$$

$$\text{Year 4, 5, 6} = \$15,000 \times .05 = \$750$$

$$\text{Year 7-15} = \$45,000 \times .04 = \underline{\$1,800}$$

$$\$3,100 \text{ total commissions (a)}$$