

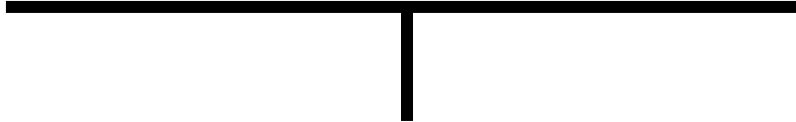


# Principles 2

## Math Help

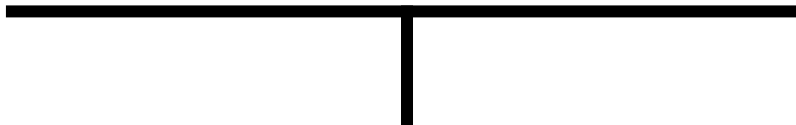
1

**The quarterly interest payment on a loan is \$3,900. The interest rate is 8%. What is the loan amount?**



2

**Broker Lily listed a property for \$310,000. She negotiated 6% total compensation and is offering half to the selling (buyer's) broker. Broker Suni sold the house for \$308,000. How much did Suni receive?**



3

**Zeke bought a tract of land that measures 1.6 miles by 700 feet. How many acres does Zeke have?**

4

**John purchased 87 acres of land. How many square feet of land does he have?**



# Principles 2

## Math Help

5

**Lone Star Credit Union is charging 2 discount points and 1 origination point. What amount will the buyer be charged at closing on a \$195,000 loan?**

---

6

**Broker Oscar listed a house for \$295,000. He negotiated 5% total compensation and has agreed to give 55% to the selling (buyer's) broker. Broker Ginger sold the house for \$291,000. How much did Broker Ginger make?**

---

7

**The Franklin's property has an assessed value of \$297,000. If the tax rate is \$2.35 per hundred, how much are their annual taxes?**

8

**Janie bought a 4.5 acre tract of land. How many square feet of land does she have?**

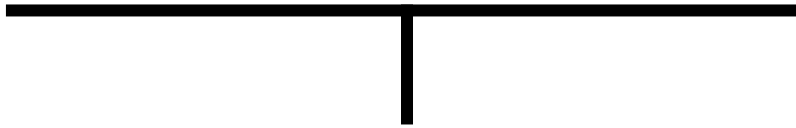


# Principles 2

## Math Help

9

**Broker Leo listed a property with total compensation of 5%. When the property sold, Leo's half of the commission was \$13,250. What was the sales price of the property?**



10

**Cyrus bought an investment property has an annual Gross Scheduled Income of \$325,000 with operating expenses of \$175,000 per year. What is the Net Income?**

11

**Fred, a salesperson, earns 55% of his broker's share of a commission. He sold a home for \$295,000 and the listing broker shared half of his 6% commission with the selling (buyer's) broker. How much did Fred make?**



12

**The Net Income of Julio's investment property is \$84,000. He has the property listed for \$759,000. What is the Capitalization Rate of Julio's property?**



# Principles 2

## Math Rationale

1

**The quarterly interest payment on a loan is \$3,900. The interest rate is 8%. What is the loan amount?**

$$\frac{\$3,900 \times 4 \text{ quarters} = \$15,600}{8\%}$$

8%

**\$195,000**

2

**Broker Lily listed a property for \$310,000. She negotiated 6% total compensation and is offering half to the selling (buyer's) broker. Broker Suni sold the house for \$308,000. How much did Suni receive?**

**\$9,240**

3%

\$308,000

3

**Zeke bought a tract of land that measures 1.6 miles by 700 feet. How many acres does Zeke have?**

$$5,280 \text{ ft} \times 1.6 \text{ miles} = 8,448 \text{ ft}$$

$$8,448 \text{ ft} \times 700 \text{ ft} = 5,913,600 \text{ sf}$$

$$5,913,600 \text{ sf} / 43,560 \text{ sf} = \mathbf{135.76 \text{ acres}}$$

4

**John purchased 87 acres of land. How many square feet of land does he have?**

$$87 \text{ acres} \times 43,560 \text{ sf} = \mathbf{3,789,720 \text{ sf}}$$



# Principles 2

## Math Rationale

5

**Lone Star Credit Union is charging 2 discount points and 1 origination point. What amount will the buyer be charged at closing on a \$195,000 loan?**

**\$5,850**

$$2 + 1 = 3\%$$

\$195,000

6

**Broker Oscar listed a house for \$295,000. He negotiated 5% total compensation and has agreed to give 55% to the selling (buyer's) broker. Broker Ginger sold the house for \$291,000. How much did Broker Ginger make?**

\$14,550

5%

\$291,000

**\$8,002.50**

55%

\$14,550

7

**The Franklin's property has an assessed value of \$297,000. If the tax rate is \$2.35 per hundred, how much are their annual taxes?**

Convert \$2.35 to a decimal

$$.0235 \times \$297,000 = \textbf{\$6,979.50}$$

-OR-

$$\$297,000 / 100 = 2,970$$

$$2,970 \times \$2.35 = \textbf{\$6,979.50}$$

8

**Janie bought a 4.5 acre tract of land. How many square feet of land does she have?**

$$4.5 \text{ acres} \times 43,560 \text{ sf} = \textbf{196,020 sf}$$



# Principles 2

## Math Rationale

9

**Broker Leo listed a property with total compensation of 5%. When the property sold, Leo's half of the commission was \$13,250. What was the sales price of the property?**

$$\begin{array}{r|l} \$13,250 \times 2 = \$26,500 & \\ \hline 5\% & \text{\textbf{\$530,000}} \end{array}$$

10

**Cyrus bought an investment property has an annual Gross Scheduled Income of \$325,000 with operating expenses of \$175,000 per year. What is the Net Income?**

$$\$325,000 - \$175,000 = \text{\textbf{\$150,000}}$$

11

**Fred, a salesperson, earns 55% of his broker's share of a commission. He sold a home for \$295,000 and the listing broker shared half of his 6% commission with the selling (buyer's) broker. How much did Fred make?**

$$\begin{array}{r|l|l|l} \$17,700 / 2 = \$8,850 & & \text{\textbf{\$4,867.50}} & \\ \hline 6\% & \$295,000 & 55\% & \$8,850 \end{array}$$

12

**The Net Income of Julio's investment property is \$84,000. He has the property listed for \$759,000. What is the Capitalization Rate of the property?**

$$\$84,000 / \$759,000 = \text{\textbf{11.07\%}}$$