

Name \_\_\_\_\_

Date \_\_\_\_\_

Mr. Tallman

**Do Now**

1) A shoe store buys a pair of boots from a supplier for \$75. What is the amount of markup?

orig: 75

$$mu = orig (1.)$$

mu: X

$$X = 75(.25)$$

Y: 25%

$$X = \$19.50$$

2) A store pays \$70 for a bicycle. The cost to the customer is \$84. What is the percent of the markup?

orig: 70

$$mu = orig (1.)$$

mu: 14

$$\frac{14}{70} = \frac{14}{70}$$

Y: X

$$X = 0.2 \rightarrow 20\%$$

**Lesson #41 - Commission**

A **commission** is a percentage of sales that are paid to a salesperson as an additional amount to their salary.

Some jobs that pay commission include:

- Sales people (cars, boats, furniture)

- Real Estate Agents

To find the amount of commission:

<b><u>Commission Equation</u></b>	<b><u>Commission Proportion</u></b>
<p>Commission = sales(%)</p> <p><b>**PERCENTS MUST BE TURNED INTO DECIMALS**</b></p>	$\frac{\text{commission}}{\text{sales}} = \frac{\%}{100}$

Example 1) Brody sells cars for a popular car dealership. He sold a car for \$38,500. He earns a 3% commission on each car he sells. How much commission did he earn on the car he sold?

Orig: 38500

Com: X

r: 3

$$\text{Com} = \text{orig}(r)$$

$$X = 38500(.03)$$

$$X = \$1,155$$

Example 2) Richard is paid 8% commission on his carpet sales. How much commission will he earn if he sells \$1650 worth of carpets?

Orig: 1650

Com: X

r: 8

$$\text{Com} = \text{orig}(r)$$

$$X = 1650(.08)$$

$$X = \$132$$

Example 3) Maria receives an annual salary of \$25,000 plus 20% commission on her total sales. Last year, Maria made \$80,000 in sales. How much money did Maria make in total last year?

Orig: 80,000

Com: X

r: 20%

$$\text{Com} = \text{orig}(r)$$

$$X = 80,000(.2)$$

$$X = 16,000$$

$$80,000 + 16,000$$

$$\$96,000 \text{ last year}$$

Example 4) Shawna sells real estate and receives 3% commission on property she sells. Shawna also makes a flat rate of \$500 per month. This month, she sold a home worth \$118,000. How much money did Shawna make in total this month?

Orig: 118,000

Com: X

r: 3

$$\text{Com} = \text{orig}(r)$$

$$X = 118,000(.03)$$

$$X = \$3540$$

$$3540 + 500 = \$4040 \text{ last month}$$

### Now, You Try

5) Jason is a real estate agent. He earns a 4% commission on each house he sells. How much commission will he earn if he sells a house for \$270,000?

Orig: 270,000

$$\text{Com} = \text{orig}(\%)$$

$$X = 270000(.04)$$

Com: X

$$X = \$10,800$$

%: 4%

6) Cristina's monthly salary is \$3,250 plus she earns a 1.4% commission on her sales for the month. Cristina's sales for the month of July were \$51,000. What was her total earnings for July?

Orig: 51000

$$\text{Com} = \text{orig}(\%)$$

$$X = 51000(.014)$$

Com: X

$$X = \$714$$

%: 1.4%

$$3250 + 714$$

$$\$3964 \text{ in July}$$

### Challenge Problems

7) The sports booster club sold candles as a fundraiser to support the new team. The club earns commission on each candle they sell. If the club earns a 30% commission on candle sales, what would the club's total candle sales be if they earned \$500 in commission?

Orig: X

$$\text{Com} = \text{orig}(\%)$$

$$\frac{500}{.30} = \frac{X(.30)}{.30}$$

Com: 500

$$X = \$1666.67$$

%: 30

8) Robert's company pays him a  $12\frac{1}{2}\%$  commission on all of his sales over \$600. One week, Robert sold \$1,400 worth of merchandise. He also earns \$10 per hour. If Robert worked 40 hours for the week and sold \$1,400 worth of merchandise, how much does Robert make for the week?

$$\text{Commission Amount: } 1400 - 600 = \$800$$

Orig: 800

$$\text{Com} = \text{orig}(\%)$$

$$X = 800(.125)$$

Com: X

$$X = \$100$$

%: 12.5

$$40(10) = \$400 \text{ in Salary for the week}$$

$$\$400 + \$100 = \$500$$

$$\$500 \text{ total}$$

