CECS 100
Missing/Extra Information lab

Part I

Each problem below does not give enough information for you to solve it. Describe the information you would need to solve the problem.

1. Fourteen percent of the coated chocolate candies in Amin's bag were yellow. At that rate, how many of the candies were yellow

2. Patrick is putting up a fence around all four sides of his back yard. The fence costs $2.25 per foot, and his yard is 150 wide. How much will the fence cost?

3. Yoko worked 5 days last week. She made $6.75 per hour before taxes. What was her total earnings before taxes were taken out.

4. Which is a better buy: a 4 oz. bar of soap for 88cents or a bath bar for $1.20?

5. Randy bought a used car for $4,568 plus sales tax. What was the total cost of the car?

6. The Portes family ate at a restaurant, and each of their dinners cost $5.95. They left a 15% tip. What was the total amount of the tip?

7. If a kudzu plant grown 3 feet per day, what month will it be 90 feet long?

8. Bethany traveled by car to her sister's house in Kodiak Bear Lake. She traveled at an average speed o 52 miles per hour. She arrived at 4:00 PM. How far did she travel?

9. Terrence earns $7.50 per hour plus 5% commission on total sales over $500 per day. Today he sold $6,500 worth of merchandise. How much did he earn for the day?

10. Michelle works at a department store and gets an employee's discount on all her purchases. She wants to buy a sweater that sells for $38.00. How much will the sweater cost after he discount?

Part II

In each of the following problems, there is **extra information** given. Look closely at the question, and use only the information you need to answer it.

Example: Gary was making $6.50 per hour. His boss gave him a 52 c per hour raise. Gary works 40 hours per week. What percent raise did Gary receive?

Solution: to figure the percent of Gary's raise, you do not need to know how many hours per week Gary works. That is extra information net needed to answer the question. To figure the percent increase, simply divide the change in pay, $0.52, by the original wages, $6.50. $0.52 \div 6.50 = 0.08$
Gary received an 8% raise.
To show the problem solving steps:
Known values:

- The original wages, $6.50
- The change in pay, $0.52

Unknown values
- The raise percentage

Basic equation:

To calculate percentage we divide Change/Original and we multiply by 100

Working equation:

Same as the basic

Substitute

$(0.52 \div 6.50) \times 100 = 0.08$

In the following questions:
1. **determine what information is needed from the problem to answer the question.**
2. **Highlight the extra information**
3. **Solve the problem showing problem solving steps**

1. Leah wants a new sound system that is on sale for 15% off the regular price of $420. She has already saved $325 toward the cost. What is the dollar amount of the discount?

2. Praveen bought a shirt for $34.80 and socks for $11.25. He gets $10.00 per week for his allowance. He paid $2.76 sales tax. What was his change from the $20 bills?

3. Marty worked 38 hours this week, and he earned $8.40 per hour. His taxed and insurance deductions amount to 34% of his gross pay. What is his total gross pay?

4. Tamika went shopping and spent $4.80 for lunch. She wants to buy a sweater that is on sale for 1/4 off the regular $56.00 price. How much will she waive?

5. Nick drove an average of 52 miles per hour for 7 hours. Her car gets 32 miles per gallon. How far did she travel?

6. The odometer on Melody's car read 45,920 at the beginning of her trip and 46,460 at the end of her trip. Her speed averaged 54 miles per hour, and she used 20 gallons of gasoline. How many miles per gallon did she average?

7. Eighty percent of the eight graders attended the end-of-the-year class picnic. There are 160 eight graders and 54% of them ride the bus to school every day. How many students went to the class picnic?

8. Matt has $5.00 to spend on snacks. Tastee Potato chips cost $2.57 for a one-pound bag at the grocery store. T-Mart sells the same bag of chips for $1.98. How much can he save if he buys the chips at T-Mart?

9. Elaina wanted to make 10 cakes for the band cake sale. She needed $1\frac{3}{4}$ cups of flour and $2\frac{1}{4}$ cups of sugar for each cake. How many cups of flour did she need in all?