26. Percent error calculations are used to determine how close to the true values, or how accurate, experimental values really are. The formula is similar to finding percent of change.

$$\text{Percent Error} = \frac{|\text{Experimental Value} - \text{Actual Value}|}{\text{Actual Value}} \times 100$$

In chemistry class, Charlie records the volume of a liquid as 13.3 milliliters. The actual volume is 13.6 milliliters. What is his percent error? Round to the nearest percent. _____

H.O.T. FOCUS ON HIGHER ORDER THINKING

27. **Look for a Pattern** Leroi and Sylvia both put $100 in a savings account. Leroi decides he will put in an additional $10 each week. Sylvia decides to put in an additional 10% of the amount in the account each week.

a. Who has more money after the first additional deposit? Explain.

_____

_____

b. Who has more money after the second additional deposit? Explain.

_____

_____

c. How do you think the amounts in the two accounts will compare after a month? A year?

_____

_____

_____

Name: _____ Date: _____

Ms. Napolitano CCSS.7.RP.3 and 7.EE.2

Homework 08_:

Shauna borrows $400 from her parents to buy a phone. She agrees to pay them back plus 4% simple interest over one year.

Part A

Write an equation to represent the total amount Shauna will owe her parents.

Part B

What is the total amount of money Shauna will owe her parents?

A value of 600 increases by 15%.

Part A

Write an equation that could be used to find the new value.

Part B

What is the new value?

Determine if the equation $\frac{1}{4}x = y$ represents a proportional relationship.

Part A

Write four sets of values that represent $\frac{1}{4}x = y$ in the table below.

x				
y				

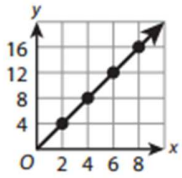
Part B

Does the equation represent a proportional relationship? Use your table from Part A to explain your answer.

_____

_____

Use the graph to answer the following questions.



Part A

What is the constant of proportionality for this relationship?

Part B

Give a possible real-world example of what the constant of proportionality could represent.

Hank's speedometer reads 60 miles per hour, but during a road test he finds that he was actually driving 56 mph. What is the percent error in Hank's speedometer?

Show your work.

The percent error is _____.

Gary's pay is $15 per hour. He receives a 6% pay raise.

Part A

Could Gary use any of the following methods to calculate his new hourly pay rate? Choose *Yes* or *No* for each method.

a. Calculate 15% of 6. ☐ Yes ☐ No

b. Multiply 15 by 0.06 and add this result to 15. ☐ Yes ☐ No

c. Multiply his original pay by 1.06. ☐ Yes ☐ No

d. Solve the equation $\frac{x}{15} = \frac{106}{100}$ for x. ☐ Yes ☐ No

e. Add $6 to his original pay. ☐ Yes ☐ No

Part B

What is Gary's new hourly pay rate?