

Exploring the World of Math

Name: _____ Date: _____

Percentages

1. Find the following:
 - a. What is 90% of 155
 - b. What is 6¼% of \$950
 - c. 75 is what percent of 107
 - d. 0.003 is what percent of 250

Percent of Error Formula

$$\text{Percent Error} = \frac{\text{Measured value} - \text{Theoretical Value}}{\text{Theoretical Value}} \times 100$$

2. The medical assistant measured 30.25 cc of fluid. The calculated value was 29.75 cc of fluid. What is the percent of error between the measured and calculated amount?
3. The travel manager predicted the cost of the Hawaii vacation at \$2500. The actual cost of the vacation was \$3105.75. What is the percent of error between the actual and calculated amount?
4. The accountant counted that we have 375 flash drives in stock during the audit. The IT manager reported that there were 399 flash drives in stock. What is the percent of error between the actual count and the previously reported amount?

Investments

5. The front office needs to purchase a new computer server for \$11500. The supervisor has put you in charge of the purchase and the accountant says the small business loan will have a 5½% interest rate for 4 years. Using the formula $I = PRT$, where P is the cost of the microscope, R is the interest rate and T is time in years. What is the interest on the loan and the total cost of the server?

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6. Mitch Dunn, the Vet Tech is involved in purchasing four small test chambers for the County Clinic. Each environmental chamber will cost \$9200 apiece. What is the simple interest on a 3.5% business loan for 60 months using the $I=PRT$ formula? I is the interest, P is the loan amount, R is the interest rate and T is the time in years. Adding the Interest to the loan amount, what is the total cost of the test chambers?

Actual Cost of Products

7. A set of dishes costs \$89.99 at the store. We find that the Standard Factory Cost (SFC) which includes material, labor and overhead for the set at the manufacturer is \$15.25. The SFC is what percent of the consumer price?

Discounts

8. The store is offering discounts on all purchases. Calculate the cost of the following:
- 20 lbs of bananas for \$0.55 per pound and a 20% discount
 - 3 pairs of shoes for \$19.99, \$29.99 and \$35.00 and a 40% discount
 - 2 pairs of pants for \$25 each and a 50% discount
 - 80% off of a \$75 purchase
 - 15% off the purchase of a new television set for \$799

Down Payments

9. If the caterer is making 5000 canapés for \$0.15 each and the contract calls for $\frac{1}{3}$ down payment, what is the down payment and the balance due?