

1. Sharon has scores of 84, 80, 68, 72 and 98 on her last five tests. What must she score on her next test in order to have an average score of 81? _____

Explain your answer.

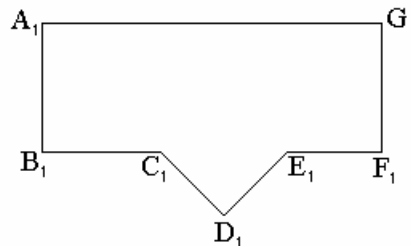
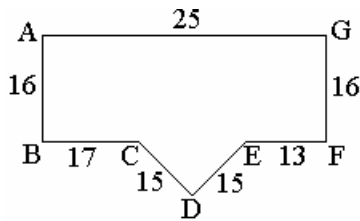
2. A store manager marked up items to give her a 40% profit. Some of those items were not selling, so she marked their price down by 40%. On any item that was marked down, does the final price represent a profit or a loss, or does she break even? _____

Explain your answer. Show all work.

3. Bob's Bargain Basement sells backpacks at a 25% discount. Maribel's Mart sells the same backpacks at two successive discounts of 15% and 10% respectively. If the original price of a backpack is \$29.95, which store offers the better price and by how much? _____

Explain your answer.

4. If polygon ABCDEFG is similar to polygon $A_1B_1C_1D_1E_1F_1G_1$, and $A_1B_1 = 20$, what is the perimeter of polygon $A_1B_1C_1D_1E_1F_1G_1$? _____



5. Suppose that \otimes means $x + 1$, \boxtimes means x^2 , and $\triangle x$ means $3x - 5$. What would be the value of :

- $\triangle 2$
- $\otimes(\boxtimes 3) + \otimes(\triangle 1)$
