Percentages

April 10, 2011

1. At first, the price of gas was increased 100%. Then, it dropped by 50%. How did the price of gas change?

2. Last year, the price of milk increased by 20% compared to what it was two years ago. This year, the price of milk dropped 20% compared to what it was last year. Does the milk cost more now or two years ago?

3. Compare: 15.43% of 5 versus 5% of 15.43?
4. How does the product of two numbers change if one of them is increased by 50% and the other one is decreased by 50%?

5. Annie, Betty and Cindy were participating in a 100 meter race. When Annie was crossing the finish line, Betty was 10 meters behind. When Betty was crossing the finish line, Cindy was 10 meters behind. How much behind Annie was Cindy at the moment Annie crossed the finish line?

6. In BuySmart, the price of a sofa was reduced by 10% in the first week, and then by another 10% the next week. In the rival store SmartShop, the price of a sofa was reduced just one time by 20%. Assuming that in the beginning the price of the sofa was the same in both stores, which of the stores now gives their customers a better deal?

7. In spring, the brown bear dropped 25% of its weight. In summer, it gained 20%. In the fall, it dropped 10%. In winter, it gained 20%. Do you think the bear lost weight or gained weight?
8. The price of cheese dropped by 20%. How much more cheese (in percentage terms) can you now buy for the same amount of money?

9. The water of the Pacific Ocean contains 3.5% salt (by weight). How much fresh water do you need to add to 40 kg of water from the Pacific Ocean to get a mixture containing 0.5% salt?

10. You started with the number 51.2, increased it three times by the same percentage. Then, you decreased it three times by the same percentage and got 21.6. What was that percentage?