Increase/Decrease Problems

Name: _____ Score: _____

Solve the following percentage problems and show your workings.

1. Last week I bought a kilogram of tomatos for $2.
    This week the price was only $1.50 a kilogram.
    By what percentage did the price decrease?

2. Yesterday at noon the temperature was 32 degrees celsius. Today at noon
    it was 40 degrees. By what percentage did the temperature increase?

3. The price of a liter of milk increased 10% compared with last year.
    If the new price is $1.21 per liter, what was last year's price?

4. Maria works and gets $7.50 per hour. Her boss is so happy with her
    work that he decided to raise her pay with $1.50 per hour. What
    percentage was her pay raise?

5. Peter deposited 1,000 dollars in a bank account. After 5 years he had
    $1,500 in his account. By what percentage did his bank balance grow?

6. The rent on my apartment is $1,200 a month. I asked the landlord to
    lower the rent by 10%. Luckily he agreed. What is the new
    monthly rent I have to pay?

Answers

Solve the following percentage problems and show your workings.

1. Last week I bought a kilogram of tomatos for $2. This week the price was only $1.50 a kilogram. By what percentage did the price decrease?

   (2 -1.5) ÷ 2 x 100 = 25%

2. Yesterday at noon the temperature was 32 degrees celsius. Today at noon it was 40 degrees. By what percentage did the temperature increase?

   (40 -32) ÷ 32 x 100 = 25%

3. The price of a liter of milk increased 10% compared with last year. If the new price is $1.21 per liter, what was last year's price?

   1.21 ÷ 1.1 = $1.10

4. Maria works and gets $7.50 per hour. Her boss is so happy with her work that he decided to raise her pay with $1.50 per hour. What percentage was her pay raise?

   (9 -7.50) ÷ 7.50 x 100 = 20%

5. Peter deposited 1,000 dollars in a bank account. After 5 years he had $1,500 in his account. By what percentage did his bank balance grow?

   (1,500 -1,000) ÷ 1,000 x 100 = 50%

6. The rent on my apartment is $1,200 a month. I asked the landlord to lower the rent by 10%. Luckily he agreed. What is the new monthly rent I have to pay?

   1,200 -(1,200 x 0.1) = $1,080