Algebra & Functions (Maths 201–016)

1. The store where I bought my new shoes marks up their products by 20% . If I paid $48 for these shoes, how much did the store pay for them?

2. I went to the convenience store and bought a bag of organic milk. It cost me $7.50, but I know that the store only paid $6. What is the store's markup rate for organic milk?

3. A pair of shoes is on sale for 35% off. If they usually cost $300, what is the sale price?

4. If I invest $1000 and earn $475 in interest after 5 years, what was the (simple) interest rate (per year)?

5. After a 15% increase, a town has 2300 people. What was the population before the increase?

Answers

1. $40   2. 25%   3. $195   4. 9.5%   5. 2000

Hints: the relevant equations that have to be solved are these:

1. $48 = C + .20C$

2. $7.50 = 6 + 6MR$

3. $SP = 300 - .35 \times 300$

4. $475 = 5000r$

5. $1.15P = 2300$