College Mathematics
growth practice

1. The price of a sweater goes up 7%. If the price was $70, what is the new price?

2. A 40% decrease is followed by a 40% increase. What is the net effect?

3. The population of a city has gone up 2.9% every year.
   What must have been the population 17 years ago if it is now 650,000?

4. There is an account that pays 12% annual interest, compounded monthly.
   How much should you put into this account every month for 40 years to end up with $6,000,000?

5. The population of a city goes up 2.9% every year.
   If the population is now 500,000, what will it be in 17 years?

6. The price of a sweater goes up 7%. The new price is ___ times the old price.

7. An investment pays 9% interest, compounded monthly.
   If you put $2000 into this investment, what will be the value in 10 years?

8. The price of a jacket goes down 20% and that price is discounted 30%.
   If the final price is $126, what was the original price?

9. There is an account that pays 12% annual interest, compounded monthly.
   If you put $100 into this account every month, how much will you have in 40 years?

10. The population of a city goes up 2.9% each year for 17 years.
    Compare the initial and final populations.

11. An investment pays 9% interest, compounded monthly.
    How much should you put in now, so you will have $8000 in 10 years?

12. The price of a stock went up 18%, then up 25%, then up 9%, then down 7%, and then up 15%.
    How much should you have invested so that it would be worth $10,000 now?

13. The price of a stock went up 18%, then up 25%, then up 9%, then down 7%, and then up 15%.
    What is the net change?

14. The price of a jacket goes down 20% and that price is discounted 30%. What is the net effect?

15. The price of a jacket goes down 20% and that price is discounted 30%.
    If the original price was $150, what is the final price?

16. The price of a stock went up 18%, then up 25%, then up 9%, then down 7%, and then up 15%.
    If you had invested $4000 in this stock, how much would it be worth?

17. The price of a sweater went up 7%. If the new price is $60, what was the old price?