PERCENTAGES

Compound Calculations :

For increases/appreciation add to 100% and change to decimal

For decreases/depreciation subtract from 100% and change to decimal.

In both cases the power used is the amount of replications required.

Example 1) 2.4% depreciation for 8 years on £15000

would be $15000 \times (0.976)^8$…[as 100% – 2.4% = 97.6% = 0.976] = £12350.65

Example 2) 3.7% appreciation for 5 years on £3450

Would be $3450 \times (1.037)^5$…[as 100% + 3.7% = 103.7% = 1.037] = £ 4137.26

Now try these…give solutions to nearest penny (2 d.p)

1. An Increase of 15% on £800 for 6 years.	2. An Increase of 18% on £1200 for 5 years.	3. An appreciation of 27% on £8000 for 9 years.	4. An appreciation of 6% on £2500 for 4 years.
5. A decrease of 15% on £800 for 6 years.	2. A decrease of 18% on £1200 for 5 years.	3. A reduction of 27% on £8000 for 9 years.	4. A depreciation of 6% on £2500 for 4 years.
9. An Increase of 7.5% on £7000 for 9 years.	10. An appreciation of 5.2% on £12500 for 3 years.	11. An Increase of 0.5% on £80000 for 4 years.	12. An Increase of 0.32% on £120000 for 6 years.
13. A depreciation of 7.5% on £7000 for 9 years.	14. A decrease of 5.2% on £12500 for 6 years.	15. A depreciation of 0.5% on £80000 for 6 years.	16. A reduction of 0.32% on £120000 for 6 years.

SOLUTIONS

1. £1850.45	2. £2745.31	3. £68758.04	4. £3156.19
5. £301.72	6. £444.89	7. £470.97	8. £1951.87
9. £13420.67	10. £14553.16	11. £81612.04	12. £122322.51
13. £3470.35	14. £9073.19	15.£77629.80	16. £117714.35

(ITS IMPORTANT THAT YOUR SOLUTIONS MATCH UP EXACTLY WITH THESE ANSWERS, INCORRECT WORKING WILL RESULT IN VERY SIMILAR, BUT INCORRECT SOLUTIONS…CHECK CAREFULY)