

GCSE Maths Takeaway 83 - Compound Interest and Depreciation

| Name: | Date: |
|--|---------------------------------------|
| £600 is invested at a compound interest rate of 5% per annum. What is it worth after 3 years? A: £694.58 C: £690 | Correct Answer: A B C D Explanation: |
| B: £694.56 D: £694 | |
| £200 is invested at 5% per annum compound interest for three years. The interest earned is given by: A. $200 \times 1.05^3 - 200$ B. $200 \times 1.05 \times 3$ | Correct Answer: A B C D Explanation: |
| C. $200 \times 0.05 \times 3$ D. 200×0.05^3 | |
| | |
| A bank pays compound interest of 5% each year. Kate deposits £500. | Correct Answer: A B C D Explanation: |
| Which calculation below would work out how much money Kate would have in her bank after 3 years? | |
| A (500 × 1.05) × 3 | |
| B 500 × 1.05 × 1.05 × 1.05 | |
| 500 + (3 × 1.05) | |
| D 1.05×500^3 | |

| | Correct Answer: A B C D |
|---|--------------------------|
| Each year, Peter gets a pay rise of 8%. Initially he is paid £20,000 | Correct Ariswer. A B C B |
| | Explanation: |
| Which calculation below shows show much Peter is paid at the end of 2 years? | |
| A 20000 × 1.8 ² | |
| B 20000 × 1.08 × 2 | |
| | |
| $20000 + 1.08 \times 1.08$ | |
| D 20000×1.08^2 | |
| | |
| | Correct Answer: A B C D |
| Each year, my car depreciates in value by 12%. At the moment it is worth £1,500 | |
| moment it is worth £1,500 | Explanation: |
| Which calculation below shows show much my car is worth after 4 years? | |
| _ | |
| A $1500 \div 1.12^4$ | |
| B $1500 - 1.12 \times 1.12 \times 1.12 \times 1.12$ | |
| | |
| $ 1500 \times 0.88 \times 0.88 \times 0.88 \times 0.88 $ | |
| D 1500×1.12^4 | |